SECTION LAN SYSTEM

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PRECAUTIONS

PRECAUTIONS PFP:00001 А Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT **BELT PRE-TENSIONER**" UKS00171 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. Е 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. F 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 UKS0017J When connecting CONSULT-II to data link connector, connect them through CONSULT-II CONVERTER. Н 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. J If NO, GO TO 5. 2 Is there any indication other than indications relating to CAN communication system in the self-diagnosis results? LAN If YES, GO TO 3. _ If NO, GO TO 4. 3. Based on self-diagnosis results unrelated to CAN communication, carry out the inspection. L Malfunctions may be detected in self-diagnosis depending on control units carrying out CAN communica-4. tion. Therefore, erase the self-diagnosis results. Μ 5. Diagnose CAN communication system. Refer to LAN-5, "TROUBLE DIAGNOSES WORK FLOW" . Precautions for Trouble Diagnosis UK\$0017K **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 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.)



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[CAN]

| ROUBLE DIAGNOSES WORK FLOW | PFP:00004 |
|--|-----------------------------|
| /hen Displaying CAN Communication System Errors /HEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM | UKS0046G |
| 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. | |
| HEN A MALFUNCTION IS DETECTED EXCEPT CAN COMMUNICATION SYSTEM | |
| Removal and installation of parts: When the units that perform CAN communication or the set to CAN communication are removed and installed, malfunction may be detected (or DTC ot communication may be detected). | ensors related her than CAN |
| 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, malfur detected by self-diagnosis according to the units. | nction may be |
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TROUBLE DIAGNOSIS FLOW CHART

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



- Step 1: Refer to <u>LAN-7, "SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)"</u>.
- Step 2: Refer to <u>LAN-8</u>, "ACQUISITION OF DATA BY CONSULT-II".
- Step 3: Refer to <u>LAN-9</u>, "HOW TO USE CHECK SHEET TABLE".
- Step 4: Refer to <u>LAN-10</u>, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced".
- Step 5: Refer to <u>LAN-120</u>, "TROUBLE DIAGNOSIS FOR SYSTEM".

[CAN]

Diagnosis Procedure SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)

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

| Body type | | | Wa | gon | | | ר־ |
|--------------------------------------|--------------|--------------|-------|-------|-------|-------|---|
| Axle | 2\ | ND | | 4\ | VD | | - |
| Engine | | | VQ4 | 0DE | | | Check basic specification of the |
| Transmission | M/T | A/T | м | /т | A | VT | vehicle. |
| Brake control | | | VE | DC | | | _J |
| Electronic locking rear differential | | | | × | | × | Select "×" if it is model with electronic |
| CAN system type | 1 | 2 | 3 | 4 | 5 | 6 | - Which number is selected when |
| CAN system trouble diagnosis | <u>XX-XX</u> | <u>XX-XX</u> | XX-XX | XX:XX | XX:XX | XX·XX | - Sequentially selecting from the top of |
| X: Applicable | | | | | | | the specification table? The number is "CAN system type" of the applicable vehicle. |
| | | | | | | | In the case of this example: It corresponds to type 5. |

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ACQUISITION OF DATA BY CONSULT-II

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



HOW TO USE CHECK SHEET TABLE



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

"-": Column not used (Initial diagnosis is not performed.)

- 4. "UNKWN": Display "UNKWN" when the diagnosed unit does not transmit the data normally. Put a check mark to it if "UNKWN" is displayed on CONSULT-II.
- 5. "UNKWN": Display "UNKWN" when the diagnosed unit does not receive the data normally. Put a check mark to it if "UNKWN" is displayed on CONSULT-II.
 - "-": Column not used (It is not necessary for CAN communication trouble diagnosis.)

NOTE:

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

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

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| ENGINE ENGINE ITRANSMIT DIAG OK VDC/TCS/ABS OK NMTER/MAA OK VDC/TCS/ABS OK NMT OK VD/WD - VD/WD - NMD/WD NKWN NODE BACK LIGHT COPY MODE BACK VD/WD NMD/WD NODE BACK NODE BACK VD/WD NMD/WD SELECT SYSTEM screen Initial Transmit Transmit Receive diagnosis | | | | | CAN | DIAG S | UPPORT | MNTR | | I DIAG S | UPPORT | MNTR | 1 | | |
|--|----|-------------------|------------------|-----------|----------------|-----------|--------|-----------|-------------|---------------|----------|-----------------|-------|-----------------------------|---------------------------|
| Image: Second State Sta | | | | | | EN | IGINE | | | EN | IGINE | | | | |
| IHANSMI DIAG OK OK INELEPANAA OK OK VIDETERMAA OK OK INEL ENVIRA OK OK INELEPANAA OK OK INECKISEC UNKWN O INECKISEC UNKWN O ICC INC OK OK INECKISEC UNKWN O INC IFERMAA OK OK ICC INC OK OK INC OK OK INC IFERMAA OK OK INC OK OK IND AND OK OK IND AND OK OK PRINT Scroll MODE BACK LIGHT COPY MODE BACK LIGHT COPY CAN DIAG SUPPORT MITH MODE MODE BACK LIGHT COPY MODE BACK LIGHT COPY CAN COM OR OR Initial Initial Transmit Receive diagnosis INKWN UNKWN UN | | | | | - | | PRSN | PAST | | | PRSN | PAST | | | |
| Image: Second | | | | (| VDC/ | SMIT DIAC | i OK | OK | BCM | SEC | | | ! | | |
| BCM/SEC_UNKWN_0 IVAC IVAC IVAC IVAC IVAC TCM OK OK IPDM E/R OK OK PRINT Scroll Up MODE Check sheet table SELECT SYSTEM screen Initial Transmit Transmit Transmit Receive diagnosis SELECT SYSTEM screen INIT SCAN DIAG SUPPORT MNTR Receive diagnosis ENGINE — UNKWN OK OK INT SCAN DIAG SUPPORT MNTR Receive diagnosis ENGINE CAN DIAG SUPPORT MNTR Receive diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis CAN COM CIRCUIT OKAN COM CIRCUIT ANG UNKWN UNKWN CAN COMM CIRCUIT ANG UNKWN UNKWN | | | | | METE | R/M&A | OK | OK | ICC | 010 | - | | 4 | | |
| ICC TCM OK OK IPDM E/R OK OK IPDM E/R OK OK PRINT Scroll Up MODE BACK LIGHT COPY Check sheet table CAN DIAG SUPPORT MNTR Receive diagnosis ENGINE CAN DIAG SUPPORT MNTR Receive diagnosis ENGINE C M UNKWN UNKWN OK CAN DIAG SUPPORT MNTR Receive diagnosis SELECT SYSTEM screen Initial Transmit Transmit Transmit Receive diagnosis SELF-DIAG RESULTS SELECT SYSTEM screen OK CAN COMM CIRCUIT CAN COMM CI | | | | J | BCM/ | SEC | UNKWN | 0 | HVAC | ; | - | - | 1 | | |
| HVAC · · · · TCM OK OK EPS · · · IPDM E/R OK OK EPS · · · IPDM E/R OK OK PRINT BCrown MODE BACK LIGHT COPY Check sheet table Check sheet table Check sheet table SELECT SYSTEM screen Initial diagnosis/diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis SELECT SYSTEM screen Initial diagnosis/diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis Receive diagnosis SELECT SYSTEM screen Initial diagnosis/diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis Receive diagnosis SELECT SYSTEM screen Initial diagnosis/diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis Receive diagnosis SELECT SYSTEM screen Initial diagnosis/diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis SELF-DIAG RESULTS SELECT SYSTEM screen INKWN V A NG UNKWN VNW VNW VNW VNW VNWN VNWN VNWN VNWN | | | | \neg | icc | | | - | ТСМ | | OK | OK | | | |
| ILUM OK OK INDER OK OK IPRINT OK OK PRINT Scroll up MODE BACK LIGHT COPY IPM E/R OK OK PRINT Scroll up MODE BACK LIGHT COPY IPM E/R OK OK PRINT Scroll up MODE BACK LIGHT COPY Check sheet table Check sheet table SELECT SYSTEM screen Initial diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis SELECT SYSTEM screen Initial diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis SELF-DIAG RESULTS SELECT SYSTEM screen Initial diagnosis CAN DIAG SUPPORT MNTR Receive diagnosis SELF-DIAG RESULTS ATT - UNKWN OK OK OK PRINT Scroll Up MODE BACK LIGHT COPY ATT - UNKWN OK OK OK PRINT Scroll Up MODE BACK LIGHT COPY SELECT SYSTEM screen Initial Transmit diagnosis CAN COMM CIRCUIT CAN COMM CIRCUIT (U1000) A/T - - UNKWN UN | | | | | HVAC | | - | - | EPS | E/D | - | - | | | |
| IPDM E/R OK OK PRINT DOWN MODE BACK LIGHT COPY AWD/4WD OK OK PRINT Scroil Up MODE BACK LIGHT COPY Check sheet table Check sheet table SELECT SYSTEM screen CAN DIAG SUPPORT MNTR diagnosis/diagnosis SELF-DIAG RESULTS BCM Initial Initial diagnosis/diagnosis CAN DIAG SUPPORT MITR Receive diagnosis SELF-DIAG RESULTS FINIT DOWN UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT AWD/4WD OK OK OK OK OK OK OK ENGINE - - UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT CAN COMM CIRCUIT BCM Indiation NG UNKWN UNKWN - - UNKWN UNKWN - CAN COMM CIRCUIT BCM ING UNKWN UNKWN - - UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT Attemption NG UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT BCM Indiation NG UNKWN UNKWN - - UNKW | | | | | FPS | | - UK | - | e4WD | E/R) | - | - | | | |
| PRINT Scroll Down MODE BACK LIGHT COPY MODE BACK LIGHT COPY MODE BACK LIGHT COPY Check sheet table Check sheet table SELECT SYSTEM screen CAN DIAG SUPPORT MNTR Initial Transmit Receive diagnosis SELF-DIAG RESULTS SELECT SYSTEM screen Initial Transmit Receive diagnosis ENGINE - - UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT CAN COMM CIRCUIT AT - NG UNKWN UNKWN - - UNKWN UNKWN CAN COMM CIRCUIT - BCM Indiation NG UNKWN UNKWN - - UNKWN UNKWN - CAN COMM CIRCUIT - METER NG - UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT - ABS | | | | | IPDM | E/R | OK | OK | AWD/ | 4WD | OK | OK | | | |
| Lown Lown Down Down Discrete table MODE BACK LIGHT COPY MODE BACK LIGHT COPY MODE BACK LIGHT COPY Check sheet table CAN DIAG SUPPORT MNTE SELECT SYSTEM screen Initial Transmit COM STRG BCM METER MWD/4W0 VDC/TCS IPDM //ABS ENGINE – OM ON CIRCUIT CAN COMM CIRCUIT (U1000) A/T – – – UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT CAN COMM CIRCUIT (U1000) – BCM NG UNKWN UNKWN – – – UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) – BCM NG UNKWN UNKWN – – – UNKWN UNKWN UNKWN UNKWN UNKWN (U1000) – METER NG – – – – – UNKWN UNKWN UNKWN (U1000) – METER NG – | | | | | P | RINT | | Scroll | F | PRINT | Scroll U | b | 1 | | |
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| Check sheet table CAN DIAG SUPPORT MNTR SELECT SYSTEM screen CAN DIAG SUPPORT MNTR Initial diagnosis Transmit ECM TCM STRG BCM /SEC METER /MAS WD/AWD VDC/TCS IPDM /ABS SELF-DIAG RESULTS ENGINE - - UNKWN - UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U1000) - AT - NG UNKWN UNKWN - - UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) - BCM Indication NG UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (U1000) - METER INdication - UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (U1000) - ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - CAN COMM CIRCUIT - ABS - NG UNKWN <th></th> <th>1</th> <th></th> <th>1</th> <th></th> <th></th> | | | | | | | | | | | 1 | | 1 | | |
| CAN DIAG SUPPORT IN THE Receive diagnosis SELECT SYSTEM screen Transmit diagnosis Receive diagnosis Initial diagnosis Transmit ECM TCM STRG METER AWD/4WD SELF-DIAG RESULTS ENGINE - UNKWN | | Check sheet table | | | | | | | | | | | | 1 | |
| Hecewe diagnosis SELECT SYSTEM screen Initial diagnosis Transmit diagnosis SELECT SYSTEM screen SELF-DIAG RESULTS ENGINE Initial diagnosis UNKWN UNKW | | | | | | | CAN | DIAG SU | | INTR | | | | | |
| diagnosis/diagnosis ECM TCM STRG BCM MelleH /SEC AMD/4WD VDC/ICS IPUM /ABS IPUM (ABS IPUM (ABS ENGINE — — UNKWN — UNKWN CAN COMM CIRCUIT (U1001) — AT — NG UNKWN UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) — BCM NG UNKWN UNKWN — — — UNKWN — — CAN COMM CIRCUIT (U1000) — METER NG UNKWN UNKWN — — — UNKWN CAN COMM CIRCUIT (U1000) — ALL MODE AWD/4WD — NG UNKWN UNKWN — — UNKWN CAN COMM CIRCUIT (U1000) — ABS — NG UNKWN UNKWN UNKWN — — CAN COMM CIRCUIT (U1000) — ALL MODE AWD/4WD — NG UNKWN UNKWN — — U | | SELECT SYSTEM | 1 screen | Initial | Transmit | | | | Receive | diagnosis | | | 10011 | SELF-DIAG | G RESULTS |
| ENGINE - - UNKWN | | | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | E/R | | |
| AT - NG UNKWN UNKWN - - UNKWN UNKWN UNKWN - CAN CAN COMM CIRCUIT (U1000) - BCM NM NG UNKWN UNKWN - - UNKWN UNKWN CAN | | ENGINE | - | - | UNKWN | - | UNKWN | - | | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCU (U1001) |
| BCM No. Individual NG UNKWN UNKWN - - UNKWN - - UNKWN CAN COMM CIRCUIT (U1000) - METER No. Indication - UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT (U1000) - ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT (U1000) - ABS - NG UNKWN UNKWN UNKWN - - CAN COMM CIRCUIT (U1000) - ICAN COMM CIRCUIT - UNKWN UNKWN - - UNKWN - - ABS - NG UNKWN UNKWN UNKWN - - CAN COMM CIRCUIT (U1000) - | | A/T | - | NG | UNKWN | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | - |
| METER No indication UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT (U1000) - ABS - NG UNKWN UNKWN UNKWN - - CAN COMM CIRCUIT (U1000) - INS - NG UNKWN UNKWN UNKWN - - CAN COMM CIRCUIT (U1000) - INS - NG UNKWN UNKWN UNKWN - - CAN COMM CIRCUIT (U1000) - | -> | всм | No inditation | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (U1000) - ABS - NG UNKWN UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT - UNDUE NG UNKWN UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT - UNDUE NG UNXWN UNXWN UNXWN - - UNXWN - CAN COMM CIRCUIT - | | METER | No indication | - 1 | UNKWN | UNKWN | UNKWN | - | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ABS - NG UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) | | ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKWN | - | - | UNKWN | I | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| | | ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPUM E/H indication - UNKWN UNKWN - - - - - - UNKWN - - - - - - - - - - | | IPDM E/R | No indication | - | UNKWN | UNKWN | - | - | UNKWN | - | - | - | - | CAN COMM CIRCUIT (U1000) | - |
| | | | | | | SELECT | SYSTEM | <u></u> . | s | ELECT S | YSTEM_ | | | | |
| SELECT SYSTEM | | | | (| | ENG | GINE | | | A/T | | | | | |
| | | | | | | А | vт | | | ABS | ; | | | | |
| SELECI SYSTEM SELECI SYSTEM ENGINE A/T A/T ABS | | | | J | | A | BS | | | AIR B | AG | | | | |
| SELECI SYSTEM SELECI SYSTEM ENGINE A/T A/T ABS ABS AIR BAG | | | | \neg | | AIR | BAG | | | IPDM I | E/R | | | | |
| SELECT SYSTEM SELECT SYSTEM ENGINE A/T AVT ABS ABS AIR BAG IPDM E/R | | | | | | IPD | VIE/R | | | METE | R | | | | |
| SELECT SYSTEM SELECT SYSTEM ENGINE A/T A/T ABS ABS AIR BAG IPDM E/R METER | | | | l | i | MF | TEB | | ALL | MODE A | WD/4WF | | | | |
| SELECI SYSTEM SELECI SYSTEM ENGINE A/T AT ABS ABS AIR BAG IPDM E/R METER METER AIL MODE AWD/4WD | | | | ``` | 丶╟ <u>╶</u> ╶╴ | | | ╼╼╇ | ╉╼╼╼╸ | | | 4 | | | |
| SELECI SYSTEM SELECI SYSTEM ENGINE A/T AT ABS ABS AIR BAG IPDM E/R METER ALL MODE AWD/4WD | | | | | | | | | | | | | | | |
| SELECI SYSTEM SELECI SYSTEM ENGINE A/T A/T ABS ABS AIR BAG IPDM E/R METER METER ALL MODE AWD/4WD | | | | | | | Page I | Down | Page | Up | | | | | |

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 BCM because BCM is not displayed on "SELECT SYSTEM" screen.

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

NOTE:

In "CAN DIAG SUPPORT MNTR" screen, "UNKWN" is displayed on "BCM/SEC". Put a check mark to it.



3. Confirm the unit name that "UNKWN" is displayed on the copy of "CAN DIAG SUPPORT MNTR" screen of "A/T", "METER", "ALL MODE AWD/4WD", "ABS" and "IPDM E/R" as well as "ENGINE". And then, put a check mark to the check sheet table.

NOTE:

- For "A/T", "UNKWN" is displayed on "ICC/e4WD". But, do not put a check mark to their columns of reception diagnosis of the check sheet table because "UNKWN" is not listed.
- For "METER", "UNKWN" is displayed on "BCM/SEC". Put a check mark to it.
- For "ALL MODE AWD/4WD", "UNKWN" is not displayed". Do not put a check mark to it.
- For "ABS", "UNKWN" is displayed on "METER/M&A" and "ICC". But, do not put a check mark to their M columns of reception diagnosis of the check sheet table because "UNKWN" is not listed.
- For "IPDM E/R", "UNKWN" is displayed on "BCM/SEC". Put a check mark to it.

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NOTE:

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

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

Start CAN system trouble diagnosis if this procedure can be confirmed. Refer to <u>LAN-26</u>, "CAN Communication Unit".

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



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

NOTE:

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



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]

UKS00461

CAN Diagnostic Support Monitor DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ECM

| (Example) | CANL | 1AG 30 | FFORI | | | IAG SU | FFORT | |
|-----------|---------|----------|-------|----------------|---------|--------|-----------|------|
| | | ENG | AINE | | | ENG | AINE | |
| | | | PRSNT | PAST | | | PRSNT | PAST |
| | TRANS | /IT DIAG | OK | OK | METER/ | M&A | OK | OK |
| | VDC/TC | S/ABS | OK | OK | BCM/SE | C | OK | OK |
| | METER/ | M&A | OK | OK | ICC | | - | - |
| | BCM/SE | C | OK | OK | HVAC | | - | - |
| | ICC | | - | - | TCM | | OK | OK |
| | HVAC | | - | - | EPS | | - | - |
| | TCM | | OK | OK | IPDM E/ | R | OK | OK |
| | EPS | | - | - | e4WD | | - | - |
| | IPDM E/ | 'R | OK | OK | AWD/4W | /D | OK | OK |
| | PR | INT | | Scroll Down | PR | INT | Scroll Up | |
| | MODE | BACK | LIGHT | COPY | MODE | BACK | LIGHT | COPY |

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| l | | | | PKIC5987E | | |
|--------|--------------------------|---|--|------------------------------|---------------|---|
| "(| SELECT SYSTEM" screen | "CAN DIAG SUPPORT MNTR" screen | Description | Present | Past | Е |
| ENGINE | | TRANSMIT DIAG | Make sure of normal transmission. | OK/UNKWN/- | | |
| | | VDC/TCS/ABS | Make sure of normal reception from ABS actua- tor and electric unit (control unit). | | F | |
| | | METER/M&A | Make sure of normal reception from combination meter. | OK/UNKWN/- | | C |
| | BCM/SEC | Make sure of normal reception from BCM. | OK/UNKWN/- | l | G | |
| | | ICC | ICC is not diagnosed. | - | | |
| | IGINE | HVAC | HVAC is not diagnosed. | _ | OK/0/1 – 39/– | Н |
| | | ТСМ | Make sure of normal reception from TCM. | OK/UNKWN/- | | |
| | | EPS | EPS is not diagnosed. | - | | |
| | | IPDM E/R | Make sure of normal reception from IPDM E/R. | on from IPDM E/R. OK/UNKWN/- | | I |
| | | e4WD | e4WD is not diagnosed. | _ | | |
| | | AWD/4WD | Make sure of normal reception from transfer con- trol unit. | OK/UNKWN/- | | J |

Display Results (Present)

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

Display Results (Past)

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

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[CAN]

DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN (Example to the second sec

| mple) | CAN D | IAG SU | MNTR | | |
|-------|---------|----------|-------|------|-----------|
| • • | | A | | | |
| | | | PR | SNT | |
| | INITIAL | DIAG | C | ĸ | 1 |
| | TRANS | /IT DIAG | С | ĸ | |
| | ECM | | С | ĸ | |
| | VDC/TC | S/ABS | C | ĸ | |
| | METER/ | M&A | С | ĸ | |
| | ICC/e4W | /D | UNF | (WN | |
| | AWD/4W | /D | C | ĸ | |
| | | | | | |
| | | | | | |
| | PR | INT | | | |
| | MODE | BACK | LIGHT | COPY | SKIB2335E |

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

Display Results (Present)

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

| DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR DIFFERENTIAL LOCK CONTROL UNIT | | CAN DIAG SUI | | |
|---|--|--|--|-----------|
| | | INITIAL DIAG TRANSMIT DIAG ECM VDC/TCS/ABS AWD/4WD PRINT MODE BACK | PRSNT OK OK OK OK OK UGHT COPY | PKIB7196E |

| "SELECT SYSTEM" screen | "CAN DIAG SUPPORT MNTR" screen | Description | Present |
|---------------------------|-----------------------------------|---|----------|
| | INITIAL DIAG | Make sure that microcomputer in ECU works normally. | OK/NG |
| | TRANSMIT DIAG | Make sure of normal transmission. | OK/UNKWN |
| DIFF LOCK | ECM | Make sure of normal reception from ECM. | OK/UNKWN |
| | VDC/TCS/ABS | Make sure of normal reception from ABS actuator and electric unit (control unit). | OK/UNKWN |
| | AWD/4WD | Make sure of normal reception from transfer control unit. | OK/UNKWN |

Display Results (Present)

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

[CAN]

SKIB1625E

PRINT MODE BACK LIGHT

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN (Example) CAN DIAG SUPPORT MNTR FOR BCM А BCM PRSNT INITIAL DIAG ОК TRANSMIT DIAG ECM IPDM E/R METER/M&A OK OK В OK OK ОК I-KEY

| "SELECT SYSTEM" screen | "CAN DIAG SUPPORT MNTR" screen | Description | Present |
|---------------------------|-----------------------------------|---|----------|
| | INITIAL DIAG | Make sure that microcomputer in ECU works normally. | OK/NG |
| DOM | TRANSMIT DIAG | Make sure of normal transmission. | OK/UNKWN |
| | ECM | Make sure of normal reception from ECM. | OK/UNKWN |
| DCIVI | IPDM E/R | Make sure of normal reception from IPDM E/R. | OK/UNKWN |
| | METER/M&A | Make sure of normal reception from combination meter. | OK/UNKWN |
| | I-KEY | I-KEY is not diagnosed. | ОК |

Display Results (Present)

• OK: Normal

NG: Malfunction

• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR METER

| (Example) | CAN DIAG SUPPORT MNTR | | | | |
|-----------|-----------------------|----------|-------|----------------|--|
| | | ME | TER | | |
| | | | PRSNT | PAST | |
| | TRANSM | IIT DIAG | OK | OK | |
| | ECM | | OK | OK | |
| | TCM | | OK | OK | |
| | BCM/SE | 0 | ОK | OK | |
| | VDC/TCS | S/ABS | OK | OK | |
| | IPDM E/F | 3 | ОK | OK | |
| | DISPLAY | | - | - | |
| | I-KEY | | - | - | |
| | EPS | | - | - | |
| | PR | INT | | Scroll Down | |
| | MODE | BACK | LIGHT | COPY | |
| | | | - | | |

| CAN I | CAN DIAG SUPPORT MNTR | | | | | | |
|---------|-----------------------|-----------|------|--|--|--|--|
| | ME | TER | | | | | |
| | | PRSNT | PAST | | | | |
| IPDM E/ | 4 | OK | ок | | | | |
| DISPLAY | | - | - | | | | |
| I-KEY | | - | - | | | | |
| EPS | | - | - | | | | |
| AWD/4W | D | - | - | | | | |
| e4WD | | - | - | | | | |
| ICC | | - | - | | | | |
| LANE KE | EP | - | - | | | | |
| TIRE-P | | - | - | | | | |
| PRINT | | Scroll Up | | | | | |
| MODE | BACK | LIGHT | COPY | | | | |

| "SELECT SYSTEM" screen | "CAN DIAG SUPPORT MNTR" screen | Description | Present | Past |
|---------------------------|---------------------------------------|---|------------|---------------|
| | TRANSMIT DIAG | Make sure of normal transmission. | OK/UNKWN/- | |
| | ECM | Make sure of normal reception from ECM. | OK/UNKWN/- | |
| | ТСМ | Make sure of normal reception from TCM. | OK/UNKWN/- | |
| | BCM/SEC | Make sure of normal reception from BCM. | OK/UNKWN/- | |
| | VDC/TCS/ABS | Make sure of normal reception from ABS actua- tor and electric unit (control unit). or | | |
| | IPDM E/R | PDM E/R Make sure of normal reception from IPDM E/R. | | |
| METER | DISPLAY | DISPLAY is not diagnosed. | _ | OK/0/1 – 39/– |
| | I-KEY | I-KEY is not diagnosed. | _ | |
| | EPS | EPS is not diagnosed. | - | |
| | AWD/4WD | AWD/4WD is not diagnosed. | _ | |
| | e4WD | e4WD is not diagnosed. | _ | |
| | ICC | ICC is not diagnosed. | _ | |
| | LANE KEEP LANE KEEP is not diagnosed. | | _ | |
| | TIRE-P | TIRE-P is not diagnosed. | _ | |

Display Results (Present)

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

Display Results (Past)

- OK: Normal
- 0: There is malfunction now.
- 1 39: Displays when it finds malfunction in the past even if it is normal or there is a malfunction at present. Also, displays when diagnosis is not performed. It increase like 0→1→2...38→39 after returning to the normal condition whenever IGN OFF→ON. If it is over 39, it is fixed to 39 until the self-diagnostic results are erased. Keep this condition until resetting it.
- -: Undiagnosed

[CAN]

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN

| ample) | CAN D | IAG SU | PPORT | MNTR | |
|--------|-----------|------------------|-------|------|-----------|
| • • | ALI | MODE | AWD/4 | WD | |
| | | | PR | SNT | |
| | INITIAL | DIAG | C | ĸ | |
| | TRANSM | TRANSMIT DIAG OK | | | |
| | ECM | | С | ĸ | |
| | VDC/TC | S/ABS | С | ιK | |
| | TCM | | OK | | |
| | METER/M&A | | OK | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | PRINT | | | | |
| | MODE | BACK | LIGHT | COPY | PKIC2594E |

| "SELECT SYSTEM" screen | "CAN DIAG SUPPORT MNTR" screen | Description | Present |
|---------------------------|---|---|----------|
| | INITIAL DIAG | Make sure that microcomputer in ECU works normally. | OK/NG |
| | TRANSMIT DIAG | TRANSMIT DIAG Make sure of normal transmission. O | |
| | ECM Make sure of normal reception from ECM. | | OK/UNKWN |
| ALL MODE AWD/ 4WD | VDC/TCS/ABS | Make sure of normal reception from ABS actuator and electric unit (control unit). | OK/UNKWN |
| | ТСМ | Make sure of normal reception from TCM. | OK/UNKWN |
| | METER/M&A | Make sure of normal reception from combination meter. | OK/UNKWN |

Display Results (Present)

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

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

CAN DIAG SUPPORT MNTR (Example) ABS PRSNT INITIAL DIAG OK TRANSMIT DIAG OK ECM OK TCM OK METER/M&A UNKWN STRG OK UNKWN ICC AWD/4WD OK DIFF LOCK OK PRINT MODE BACK LIGHT COPY PKIB7433E

"SELECT SYSTEM" **"CAN DIAG SUPPORT** Description Present screen MNTR" screen INITIAL DIAG OK/NG Make sure that microcomputer in ECU works normally. TRANSMIT DIAG **OK/UNKWN** Make sure of normal transmission. ECM **OK/UNKWN** Make sure of normal reception from ECM. TCM Make sure of normal reception from TCM. **OK/UNKWN** ABS METER/M&A METER/M&A is not diagnosed. UNKWN STRG **OK/UNKWN** Make sure of normal reception from steering angle sensor. ICC ICC is not diagnosed. UNKWN AWD/4WD **OK/UNKWN** Make sure of normal reception from transfer control unit. DIFF LOCK Make sure of normal reception from differential lock control unit. **OK/UNKWN**

Display Results (Present)

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

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN [(Examp

| ample) | CAN DI | AG SU | MNTR | | |
|--------|---------|------------|-------|------|-----------|
| • • | | IPD | | | |
| | | | PRSNT | PAST | |
| | TRANSM | IT DIAG | | | |
| | ECM | | OK | OK | |
| | BCM/SEC | ; | OK | ОК | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | PRI | T | | | |
| | MODE | BACK | LIGHT | COPY | SKIB0595E |

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

Display Results (Present)

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

Display Results (Past)

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

CAN COMMUNICATION

System Description

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

Component Parts and Harness Connector Location



10. Air bag diagnosis sensor unit M35 11. A/T assembly F9 (with A/T)

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Revision: September 2005

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Schematic

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[CAN]



 $\frac{4W}{\Delta}$: WITH 4-WHEEL DRIVE $\frac{\Delta}{D}$: WITH AT $\frac{1}{D}$: WITH ELECTRONIC LOCKING REAR DIFFERENTIAL

BKWA0663E





BKWA0665E

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19 18







CAN Communication Unit

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

| Body type | Wagon | | | | | | |
|--------------------------------------|--------|---------|--------|--------|---------------|---------|--|
| Axle | 21 | 2WD 4WD | | | | | |
| Engine | | VQ40DE | | | | | |
| Transmission | M/T | A/T | N | 1/T | A | /Т | |
| Brake control | | | VI | DC | | | |
| Electronic locking rear differential | | | | × | | × | |
| CAN system type | 1 | 2 | 3 | 4 | 5 | 6 | |
| CAN system trouble diagnosis | LAN-36 | LAN-48 | LAN-62 | LAN-75 | <u>LAN-89</u> | LAN-104 | |

×: Applicable

NOTE:

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

Models with 4WD



• Models with electronic locking rear differential



UKS0046K

TYPE 1 System diagram

Type 1 •



Input/output signal chart

| | | | T: Transmit R: Receive | | | | |
|--|-----|--------------------------|------------------------|----------------------|--|----------|-----|
| Signals | ECM | Steering angle sensor | BCM | Combination meter | ABS actuator and electric unit (control unit) | IPDM E/R | Н |
| A/C compressor request signal | Т | | | | | R | - |
| Accelerator pedal position signal | Т | | | | R | | - |
| ASCD CRUISE lamp signal | Т | | | R | | | - |
| ASCD SET lamp signal | Т | | | R | | | - J |
| Cooling fan speed request signal | Т | | | | | R | - |
| Engine coolant temperature signal | Т | | | R | | | LA |
| Engine speed signal | Т | | | R | R | | - |
| Engine status signal | Т | | R | | | | - |
| Fuel consumption monitor signal | Т | | | R | | | - L |
| Malfunction indicator lamp signal | Т | | | R | | | - |
| Power generation command value signal | Т | | | | | R | M |
| Steering angle sensor signal | | Т | | | R | | - |
| A/C switch signal | R | | Т | | | | - |
| Blower fan motor switch signal | R | | Т | | | | - |
| Buzzer output signal | | | Т | R | | | - |
| Day time running light request sig- nal | | | Т | R | | R | - |
| Door switch signal | | | Т | R | | R | - |
| Front fog light request signal | | | Т | R | | R | - |
| Front wiper request signal | | | Т | | | R | - |
| High beam request signal | | | Т | R | | R | - |
| Horn chirp signal | | | Т | | | R | - |
| Ignition switch signal | | | Т | | | R | - |
| Low beam request signal | | | Т | | | R | - |

Revision: September 2005

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| Signals | ECM | Steering angle sensor | BCM | Combination meter | ABS actuator and electric unit (control unit) | IPDM E/R |
|--|-----|--------------------------|-----|----------------------|--|----------|
| Position light request signal | | | Т | R | | R |
| Rear window defogger switch sig- nal | | | Т | | | R |
| Sleep wake up signal | | | Т | R | | R |
| Theft warning horn request signal | | | Т | | | R |
| Turn indicator signal | | | Т | R | | |
| Fuel level sensor signal | R | | | Т | | |
| Seat belt buckle switch signal | | | R | Т | | |
| Vehicle speed signal | | | | R | Т | |
| venicle speed signal | R | | R | Т | | |
| ABS warning lamp signal | | | | R | Т | |
| Brake warning lamp signal | | | | R | Т | |
| HDC indicator lamp signal* | | | | R | Т | |
| SLIP indicator lamp signal | | | | R | Т | |
| VDC OFF indicator lamp signal | | | | R | т | |
| Front wiper stop position signal | | | R | | | Т |
| High beam status signal | R | | | | | Т |
| Low beam status signal | R | | | | | Т |
| Rear window defogger control sig- nal | R | | | | | Т |

*: HDC model only

NOTE:

CAN data of the air bag diagnosis sensor unit is not used by usual service work, thus it is omitted.

TYPE 2

System diagram

• Type 2



Input/output signal chart

| | | | | | | T: Transmit | R: Receive |
|---------------------------------------|-----|-----|-------------------------------|-----|------------------------|---|------------|
| Signals | ECM | ТСМ | Steering angle sen- sor | BCM | Combina- tion meter | ABS actua- tor and electric unit (control unit) | IPDM E/R |
| A/C compressor request signal | Т | | | | | | R |
| Accelerator pedal position signal | Т | R | | | | R | |
| ASCD CRUISE lamp signal | Т | | | | R | | |
| ASCD OD cancel request | Т | R | | | | | |
| ASCD operation signal | Т | R | | | | | |
| ASCD SET lamp signal | Т | | | | R | | |
| Battery voltage signal | Т | R | | | | | |
| Closed throttle position signal | Т | R | | | | | |
| Cooling fan speed request signal | Т | | | | | | R |
| Engine coolant temperature signal | Т | | | | R | | |
| Engine speed signal | Т | R | | | R | R | |
| Engine status signal | Т | | | R | | | |
| Fuel consumption monitor signal | Т | | | | R | | |
| Malfunction indicator lamp signal | Т | | | | R | | |
| Power generation command value signal | Т | | | | | | R |
| Wide open throttle position signal | Т | R | | | | | |
| A/T fluid temperature sensor signal | | Т | | | R | | |
| A/T position indicator lamp signal | | Т | | | R | R | |
| A/T self-diagnosis signal | R | Т | | | | | |
| O/D OFF indicator signal | | Т | | | R | | |
| Output shaft revolution signal | R | Т | | | | | |
| Turbine revolution signal | R | Т | | | | | |
| Steering angle sensor signal | | | Т | | | R | |
| A/C switch signal | R | | | Т | | | |
| Blower fan motor switch signal | R | | | Т | | | |
| Buzzer output signal | | | | Т | R | | |
| Day time running light request signal | | | | Т | R | | R |
| Door switch signal | | | | Т | R | | R |
| Front fog light request signal | | | | т | R | | R |
| Front wiper request signal | | | | т | | | R |
| High beam request signal | | | | т | R | | R |
| Horn chirp signal | | | | т | | | R |
| Ignition switch signal | | | | т | | | R |
| Low beam request signal | | | | Т | | | R |
| Position light request signal | | | | Т | R | | R |
| Rear window defogger switch signal | | | | Т | | | R |
| Sleep wake up signal | | | | Т | R | | R |
| Theft warning horn request signal | | | | т | | | R |
| Turn indicator signal | | | | Т | R | | |

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| Signals | ECM | ТСМ | Steering angle sen- sor | BCM | Combina- tion meter | ABS actua- tor and electric unit (control unit) | IPDM E/R |
|--|-----|-----|-------------------------------|-----|------------------------|---|----------|
| 1st position switch signal | | R | | | Т | | |
| Fuel level sensor signal | R | | | | Т | | |
| Overdrive control switch signal | | R | | | Т | | |
| Seat belt buckle switch signal | | | | R | Т | | |
| Stop lamp switch signal | | R | | | Т | | |
| Vahiala analaismal | | | | | R | Т | |
| | R | R | | R | Т | | |
| ABS warning lamp signal | | | | | R | Т | |
| Brake warning lamp signal | | | | | R | Т | |
| HDC indicator lamp signal [*] | | | | | R | Т | |
| SLIP indicator lamp signal | | | | | R | Т | |
| VDC OFF indicator lamp signal | | | | | R | Т | |
| Front wiper stop position signal | | | | R | | | Т |
| High beam status signal | R | | | | | | Т |
| Low beam status signal | R | | | | | | Т |
| Rear window defogger control signal | R | | | | | | Т |

*: HDC model only

NOTE:

CAN data of the air bag diagnosis sensor unit is not used by usual service work, thus it is omitted.

TYPE 3/TYPE 4 System diagram

• Type 3



[CAN]



Input/output signal chart

T: Transmit R: Receive

| Signals | ECM | Differen- tial lock control unit ^{*1} | Steering angle sensor | BCM | Combina- tion meter | Transfer control unit | ABS actuator and elec- tric unit (control unit) | IPDM E/ R | G |
|---------------------------------------|-----|---|-----------------------------|-----|---------------------------|-----------------------------|--|--------------|-----|
| A/C compressor request signal | Т | | | | | | | R | |
| Accelerator pedal position signal | Т | | | | | | R | | I |
| ASCD CRUISE lamp signal | Т | | | | R | | | | |
| ASCD SET lamp signal | Т | | | | R | | | | J |
| Cooling fan speed request signal | Т | | | | | | | R | |
| Engine coolant temperature signal | Т | | | | R | | | | |
| Engine speed signal | Т | | | | R | R | R | | LAN |
| Engine status signal | Т | | | R | | | | | |
| Fuel consumption monitor signal | Т | | | | R | | | | 1 |
| Malfunction indicator lamp signal | Т | | | | R | | | | |
| Power generation command value signal | Т | | | | | | | R | M |
| Differential lock indicator signal | | Т | | | | | R | | |
| Differential lock switch signal | | Т | | | | | R | | |
| Steering angle sensor signal | | | Т | | | | R | | |
| A/C switch signal | R | | | Т | | | | | |
| Blower fan motor switch signal | R | | | Т | | | | | |
| Buzzer output signal | | | | Т | R | | | | |
| Day time running light request signal | | | | Т | R | | | R | |
| Door switch signal | | | | Т | R | | | R | |
| Front fog light request signal | | | | Т | R | | | R | |
| Front wiper request signal | | | | Т | | | | R | |
| High beam request signal | | | | Т | R | | | R | |
| Horn chirp signal | | | | Т | | | | R | |
| Ignition switch signal | | | | Т | | | | R | |

Revision: September 2005

| Signals | ECM | Differen- tial lock control unit ^{*1} | Steering angle sensor | BCM | Combina- tion meter | Transfer control unit | ABS actuator and elec- tric unit (control unit) | IPDM E/ R |
|---|-----|---|-----------------------------|-----|---------------------------|-----------------------------|--|--------------|
| Low beam request signal | | | | Т | | | | R |
| Position light request signal | | | | Т | R | | | R |
| Rear window defogger control signal | R | | | | | | | Т |
| Sleep wake up signal | | | | Т | R | | | R |
| Theft warning horn request signal | | | | Т | | | | R |
| Turn indicator signal | | | | Т | R | | | |
| Fuel level sensor signal | R | | | | Т | | | |
| Seat belt buckle switch signal | | | | R | Т | | | |
| Vahiela spaad signal | | R | | | R | R | Т | |
| venicie speed signal | R | | | R | Т | | | |
| 4WD shift switch signal | | R | | | | Т | R | |
| ABS warning lamp signal | | | | | R | | Т | |
| Brake warning lamp signal | | | | | R | | Т | |
| HDC indicator lamp signal ^{*2} | | | | | R | | Т | |
| SLIP indicator lamp signal | | | | | R | | Т | |
| Stop lamp switch signal | | | | | | R | Т | |
| VDC OFF indicator lamp signal | | | | | R | | Т | |
| Front wiper stop position signal | | | | R | | | | Т |
| High beam status signal | R | | | | | | | Т |
| Low beam status signal | R | | | | | | | Т |
| Rear window defogger switch signal | | | | Т | | | | R |

• *1: with electronic locking rear differential model only.

• *2: HDC model only

NOTE:

CAN data of the air bag diagnosis sensor unit is not used by usual service work, thus it is omitted.

TYPE 5/TYPE 6 System diagram





Input/output signal chart

T: Transmit R: Receive Μ

| Signals | ECM | ТСМ | Differ- ential lock control unit ^{*1} | Steer- ing angle sensor | BCM | Combi- nation meter | Trans- fer con- trol unit | ABS actua- tor and electric unit (control unit) | IPDM E/ R |
|-----------------------------------|-----|-----|--|----------------------------------|-----|---------------------------|---------------------------------|---|--------------|
| A/C compressor request signal | Т | | | | | | | | R |
| Accelerator pedal position signal | Т | R | | | | | | R | |
| ASCD CRUISE lamp signal | Т | | | | | R | | | |
| ASCD OD cancel request | Т | R | | | | | | | |
| ASCD operation signal | Т | R | | | | | | | |
| ASCD SET lamp signal | Т | | | | | R | | | |
| Battery voltage signal | Т | R | | | | | | | |
| Closed throttle position signal | Т | R | | | | | | | |

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| Signals | ECM | тсм | Differ- ential lock control unit ^{*1} | Steer- ing angle sensor | ВСМ | Combi- nation meter | Trans- fer con- trol unit | ABS actua- tor and electric unit (control unit) | IPDM E/ R |
|---------------------------------------|-----|-----|--|----------------------------------|-----|---------------------------|---------------------------------|---|--------------|
| Cooling fan speed request signal | Т | | | | | | | | R |
| Engine coolant temperature signal | т | | | | | R | | | |
| Engine speed signal | Т | R | | | | R | R | R | |
| Engine status signal | Т | | | | R | | | | |
| Fuel consumption monitor signal | Т | | | | | R | | | |
| Malfunction indicator lamp signal | Т | | | | | R | | | |
| Power generation command value signal | т | | | | | | | | R |
| Wide open throttle position signal | Т | R | | | | | | | |
| A/T fluid temperature sensor signal | | Т | | | | R | | | |
| A/T position indicator lamp signal | | Т | | | | R | R | R | |
| A/T self-diagnosis signal | R | Т | | | | | | | |
| O/D OFF indicator signal | | Т | | | | R | | | |
| Output shaft revolution signal | R | т | | | | | R | | |
| Turbine revolution signal | R | Т | | | | | | | |
| Differential lock indicator signal | | | Т | | | | | R | |
| Differential lock switch signal | | | Т | | | | | R | |
| Steering angle sensor signal | | | | т | | | | R | |
| A/C switch signal | R | | | | Т | | | | |
| Blower fan motor switch signal | R | | | | Т | | | | |
| Buzzer output signal | | | | | Т | R | | | |
| Day time running light request signal | | | | | Т | R | | | R |
| Door switch signal | | | | | Т | R | | | R |
| Front fog light request signal | | | | | Т | R | | | R |
| Front wiper request signal | | | | | Т | | | | R |
| High beam request signal | | | | | Т | R | | | R |
| Horn chirp signal | | | | | Т | | | | R |
| Ignition switch signal | | | | | Т | | | | R |
| Low beam request signal | | | | | Т | | | | R |
| Position light request signal | | | | | Т | R | | | R |
| Rear window defogger switch signal | | | | | Т | | | | R |
| Sleep wake up signal | | | | | Т | R | | | R |
| Theft warning horn request signal | | | | | Т | | | | R |
| Turn indicator signal | | | | | Т | R | | | |
| 1st position switch signal | | R | | | | Т | | | |
| Fuel level sensor signal | R | | | | | Т | | | |
| Overdrive control switch signal | | R | | | | Т | | | |
| Seat belt buckle switch signal | | | | | R | Т | | | |
| Stop Jomp switch signal | | R | | | | Т | | | |
| Stop lamp Switch Signal | | | | | | | R | Т | |

| Signals | ECM | тсм | Differ- ential lock control unit ^{*1} | Steer- ing angle sensor | BCM | Combi- nation meter | Trans- fer con- trol unit | ABS actua- tor and electric unit (control unit) | IPDM E/ R |
|---|-----|-----|--|----------------------------------|-----|---------------------------|---------------------------------|---|--------------|
| Vehicle speed signal | | | R | | | R | R | Т | |
| | R | R | | | R | Т | | | (|
| 4WD shift switch signal | | | R | | | | Т | R | |
| ABS warning lamp signal | | | | | | R | | Т | [|
| Brake warning lamp signal | | | | | | R | | Т | |
| HDC indicator lamp signal ^{*2} | | | | | | R | | Т | |
| SLIP indicator lamp signal | | | | | | R | | Т | |
| VDC OFF indicator lamp signal | | | | | | R | | Т | |
| Front wiper stop position signal | | | | | R | | | | т |
| High beam status signal | R | | | | | | | | Т |
| Low beam status signal | R | | | | | | | | Т |
| Rear window defogger control signal | R | | | | | | | | Т |

• *1: with electronic locking rear differential model only.

• *2: HDC model only

NOTE:

CAN data of the air bag diagnosis sensor unit is not used by usual service work, thus it is omitted.

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CAN SYSTEM (TYPE 1)

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| CAN SYSTEM (TYPE 1) | PFP:23710 |
| Component Parts and Harness Connector Location | UK\$0053Y |
| Refer to LAN-21, "Component Parts and Harness Connector Location". | |
| Schematic | UK\$0053Z |
| Refer to LAN-22, "Schematic". | |
| Wiring Diagram — CAN — | UK\$00540 |
| Refer to LAN-23, "Wiring Diagram — CAN —". | |
Check Sheet

NOTE:

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

| | | | | CA | N DIAG SU | PPORT M | ITR | | | | |
|------------------|------------|-----------|-----------|-----------|-----------|-------------|---------------|-----------------|-------------|------------------|------------------|
| SELECT SYSTEM se | screen | Initial | Transmit | | | Receive | diagnosis | | | SELF-DIAG | RESULTS |
| | | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| IGINE | - | _ | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT | CAN COMM CIRCUIT |
| СМ | No | NG | UNKWN | UNKWN | _ | _ | UNKWN | _ | UNKWN | CAN COMM CIRCUIT | |
| TER | No | _ | UNKWN | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | CAN COMM CIRCUIT | _ |
| s | - | NG | UNKWN | UNKWN | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT | _ |
| DM E/R | No | _ | UNKWN | UNKWN | _ | UNKWN | _ | _ | _ | CAN COMM CIRCUIT | _ |
| | Indication | | 1 | I | I | 1 | 1 | | I | | |
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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 data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> 121, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".

| | | | | UA | N DIAG SU | PPORT MN | TR | | | | |
|------------------|------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|---------------------------|
| SELECT SYSTEM on | reen | | | | | Receive | diagnosis | | | | RESINTS |
| SELECT STOTEM SC | 516611 | Initial diagnosis | Iransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKWN | - | - | UNKWN | UNKWN | UNKIN | UNKIN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (UN01) |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKIN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | _ | UNKWN | - | UNKIN | UNKIN | CAN COMMCIRCUIT (U100) | _ |
| ABS | - | NG | UNKWN | | UNKIN | - | 1 | - | Ι | CAN COMMCIRCUIT (U1000) | _ |
| IPDM E/R | No indivation | Ι | UNKWN | UNKWN | Ι | UNKWN | - | - | Ι | CAN COMMCIRCUIT (U100) | _ |



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Check ECM circuit. Refer to LAN-122, "ECM Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | TR | | | | |
|--------------|------------------|-----------|-----------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|---------------------------|
| SELECT SYSTE | M screen | Initial | Transmit | | | Receive | diagnosis | | | SELF-DIAG | RESULTS |
| | | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | | _ | _ | UNKIN | UNKIN | UNKIN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (UN01) |
| BCM | No indication | NG | UNKWN | UNKIN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKIN | _ | UNKWN | _ | UNKWN | UNKWN | CAN COMMCIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKIN | UNKWN | - | _ | - | - | CAN COMMCIRCUIT (U1000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKIN | _ | UNKWN | - | — | _ | CAN COMMCIRCUIT (U1000) | _ |
| | Indication | I | | • | 1 | | | | | | 1 |



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Case 3

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Check steering angle sensor circuit. Refer to LAN-124, "Steering Angle Sensor Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | TR | | | | |
|---------------|------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------------------|
| | lecreen | | | | | Receive | diagnosis | | | | |
| SELECT STOLEN | 13016611 | Initial diagnosis | Iransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | THEODERS |
| ENGINE | _ | - | UNKWN | _ | - | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | - | UNKWN | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ABS | — | NG | UNKWN | UNKWN | UNKIN | Ι | 1 | - | Ι | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | Ι | UNKWN | 1 | - | Ι | CAN COMM CIRCUIT (U1000) | _ |



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Case 4

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Check data link connector circuit. Refer to LAN-124, "Data Link Connector Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | ITR | | | | |
|----------|------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|---------------------------|
| | M screen | | | | | Receive | diagnosis | | | | |
| | VI BUIEEN | lnitial diagnosis | lransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | TILOULIO |
| ENGINE | - | - | UNKWN | - | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCU (U1001) |
| BCM | No indivition | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indivition | - | UNKWN | UNKWN | _ | UNKWN | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | — | — | — | - | CAN COMM CIRCUIT (U1000) | - |
| IPDM E/R | No indivition | - | UNKWN | UNKWN | _ | UNKWN | — | — | Ι | CAN COMM CIRCUIT (U1000) | _ |
| | | | | • | • | • | | | | | |



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Case 5

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Check BCM circuit. Refer to LAN-125, "BCM Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | TR | | | | |
|---------------|---------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| | screen | | | | | Receive | diagnosis | | | | BESHITS |
| SELECT STOTEM | Screen | lnitial diagnosis | Iransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | TILOULIO |
| ENGINE | _ | _ | UNKWN | - | - | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (U1001) |
| BCM | No individualion | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | | UNKIN | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | |
| ABS | _ | NG | UNKWN | UNKWN | UNKWN | - | _ | - | _ | CAN COMM CIRCUIT (U1000) | |
| IPDM E/R | No indication | — | UNKWN | UNKWN | Ι | UNKVN | — | _ | — | CAN COMM CIRCUIT (U1000) | _ |



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Case 6

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Check combination meter circuit. Refer to LAN-125, "Combination Meter Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | TR | | | | |
|--------------|------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|--------------------------|
| SELECT SVSTE | Macreen | | | | | Receive | diagnosis | | | | |
| | WI SCIEELI | Initial diagnosis | lransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | TILOULIO |
| ENGINE | - | _ | UNKWN | _ | _ | UNKWN | UNKIN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCU (UN01) |
| BCM | No indication | NG | UNKWN | UNKWN | _ | - | UNKIN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indivation | — | UNKWN | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | CAN COMMCIRCUIT (U100) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | - | - | I | CAN COMM CIRCUIT (U1000) | - |
| IPDM E/R | No indication | — | UNKWN | UNKWN | _ | UNKWN | _ | — | - | CAN COMM CIRCUIT (U1000) | _ |
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Case 7

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-126</u>, "ABS Actuator and Electric Unit (<u>Control Unit</u>) <u>Circuit Inspection</u>".

| | | | | CA | N DIAG SU | PPORT MN | ITR | | | | |
|----------|------------------|----------------------|-----------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------|
| | Ascreen | | | | | Receive | diagnosis | | | | |
| | a screen | lnitial diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | TILOUEIO |
| ENGINE | - | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKIN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT |
| BCM | No indication | NG | UNKWN | UNKWN | _ | _ | UNKWN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | _ | UNKWN | _ | UNK | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | V | UNKIN | UNKIN | UNKWN | _ | _ | - | - | CAN COMMCIRCUIT (U1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | UNKWN | _ | _ | _ | CAN COMM CIRCUIT (U1000) | _ |



Check IPDM E/R circuit. Refer to LAN-127, "IPDM E/R Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | TR | | | | |
|--------------|------------------|-----------|----------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------|
| SELECT SYSTE | M screen | 1-24-1 | Trans a sea là | | | Receive | diagnosis | | | SELE-DIAG | RESULTS |
| | | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | - | — | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUI |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKIN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | _ | UNKWN | UNKWN | _ | UNKWN | _ | UNKWN | UNKIN | CAN COMM CIRCUIT (U100) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | _ | - | - | CAN COMM CIRCUIT (U1000) | - |
| IPDM E/R | No indivation | _ | UNKWN | UNKWN | _ | UNKWN | _ | — | - | CAN COMMCIRCUIT (U1000) | _ |
| | | 1 | 1 | | | 1 | | | | (0.000) | |



Case 9

Check CAN communication circuit. Refer to LAN-127, "CAN Communication Circuit Inspection" .

| | | | | CA | N DIAG SU | PPORT MN | TR | | | | |
|--------------|------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|---------------------------|
| | Maaroon | | _ | | | Receive | diagnosis | | | | |
| SELECT STOLE | IN SCIEEN | Initial diagnosis | Transmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | RESULTS |
| ENGINE | - | - | UNKIN | - | — | UNKIN | UNKIN | UNKIN | UNKIN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (UN01) |
| BCM | No inditation | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | indication | - | UNKWN | UNKWN | - | UNKWN | _ | UNKWN | UNKWN | CAN COMMCIRCUIT (U1V00) | - |
| ABS | - | V | UNKWN | UNKIN | | - | _ | - | - | CAN COMMCIRCUIT (U1V00) | - |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | UNKWN | _ | _ | - | CAN COMM CIRCUIT (U1000) | - |
| | | | | | | | | | | | |
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Case 10

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Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>A</u> <u>Circuit Inspection</u>".

| | | | | CA | N DIAG SU | PPORT MN | ITR | | | | |
|---------------|------------------|----------------------|-----------------------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| | screen | | | | | Receive | diagnosis | | | | BESHITS |
| SELECT STOLEN | Screen | Initial diagnosis | lransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | TILOULIO |
| ENGINE | _ | - | UNKWN | - | - | UNKWN | UNKWN | UNKIN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (U1001) |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | - | UNKWN | _ | UNKIN | UNKWN | CAN COMMCIRCUIT (U100) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | - | - | I | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | UNKWN | _ | - | - | CAN COMM CIRCUIT (U1000) | _ |

Case 11

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

| | | | | CA | N DIAG SU | PPORT MN | ITR | | | | |
|---------------|------------------|-----------|-----------|-------|-----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | - ·· | | | Receive | diagnosis | | | SELE-DIAG | RESULTS |
| | boreen | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | - | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | _ | UNKWN | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ABS | Ι | NG | UNKWN | - | — | - | — | - | - | CAN COMMCIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | UNKWN | — | — | _ | CAN COMM CIRCUIT (U1000) | _ |

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| CAN SYSTEM (TYPE 2) | PFP:23710 |
| Component Parts and Harness Connector Location | UKS00542 |
| Refer to LAN-21, "Component Parts and Harness Connector Location". | |
| Schematic | UKS00543 |
| Refer to LAN-22, "Schematic". | |
| Wiring Diagram — CAN — | UKS00544 |
| Refer to LAN-23, "Wiring Diagram — CAN —". | |

Check Sheet

NOTE:

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

| | | | 1 | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|------------|------------------|-----------|-----------|---------|---------|----------|-------------|-------|----------|-------|-----------------------------|-----------------------------|
| SELECT SYS | TEM screen | Initial | Transmit | | | Red | ceive diagn | osis | VDOTOC | | SELF-DIAG | RESULTS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | /SEC | /M&A | /ABS | E/R | | |
| NGINE | _ | _ | UNKWN | Ι | UNKWN | — | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| т | - | NG | UNKWN | UNKWN | _ | - | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| СМ | No indication | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ETER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| BS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | — | _ | - | _ | CAN COMM CIRCUIT (U1000) | - |
| DM E/R | No indication | - | UNKWN | UNKWN | _ | _ | UNKWN | _ | - | _ | CAN COMM CIRCUIT (U1000) | _ |
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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 <u>LAN-120</u>, "Inspection Between TCM and Data <u>Link Connector Circuit</u>".

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|---------------|------------------|----------------------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | Red | eive diagn | osis | | | SELE-DIAG | BESUITS |
| | Soreen | Initial diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | TILOULIU |
| ENGINE | _ | — | UNKWN | - | UNKWN | - | | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | _ | _ | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | _ | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | | UNKWN | 1 | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | - | - | CAN COMM CIRCUIT (U 000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | - | _ | UNKWN | _ | _ | - | CAN COMM CIRCUIT (U 000) | — |
| | | | | | | | | | | | | |
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Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-121</u>, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|------------------------------|---------------------------|
| SELECT SYSTEM | Iscreen | 1 | - | | | Red | ceive diagn | osis | | | | RESULTS |
| | loncon | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | - | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUI (UN01) |
| A/T | - | NG | UNKWN | UNKWN | - | _ | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | _ | _ | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | UNKWN | _ | UNKWN | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | - | _ | CAN COMM CIRCUIT (U 1000) | _ |
| IPDM E/R | No inclusion | - | UNKWN | UNKWN | - | - | UNKWN | - | Ι | - | CAN COMM CIRCUIT (U 000) | - |



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Case 3

Check ECM circuit. Refer to LAN-122, "ECM Circuit Inspection" .

| | | | | | CAN DIA | G SUPPO | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|---------|-------------|---------------|-----------------|-------------|------------------------------|----------------------------|
| SELECT SYSTEM | Iscreen | 1-141-1 | T | | | Red | ceive diagn | osis | | | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | _ | _ | UNKWN | - | UNKWN | _ | UNKWN | | UNKWN | UNKWN | CAN COMM CIRCUIT | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U 100) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | UNKWN | _ | UNKWN | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | _ | - | - | - | CAN COMM CIRCUIT (U 1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | _ | CAN COMM CIRCUIT (U 1000) | - |



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Check TCM circuit. Refer to LAN-123, "TCM Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-------------------------------|----------------------------|
| SELECT SYSTEM | 1 screen | | | | | Red | ceive diagn | osis | | | | RESULTS |
| | a soleen | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | - | _ | UNKWN | - | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U 1000) | CAN COMM CIRCUIT (U 01) |
| A/T | - | NG | UNKWN | UNKWN | - | — | - | | | _ | CAN COMM CIRCUIT (U 1000) | - |
| BCM | No indication | NG | UNKWN | UNKWN | - | _ | - | UNKWN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | - | _ | CAN COMIN CIRCUIT (U 1000) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | UNKWN | _ | — | _ | CAN COMM CIRCUIT (U1000) | - |
| | | | | | | | | | | | | |
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Case 5

Check steering angle sensor circuit. Refer to LAN-124, "Steering Angle Sensor Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOF | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | Iscreen | 1.010.01 | T | | | Red | eive diagn | osis | | | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | - | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | _ | _ | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | _ | - | _ | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | UNKWN | - | _ | _ | CAN COMM CIRCUIT (U1000) | Ι |



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Case 6

Check data link connector circuit. Refer to LAN-124, "Data Link Connector Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|---------------|---------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | Iscreen | 1 | T | | - | Red | ceive diagn | osis | | - | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | - | NG | UNKWN | UNKWN | — | — | - | UNKWN | UNKWN | — | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No inclusion | NG | UNKWN | UNKWN | - | - | _ | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No individuation | — | UNKWN | UNKWN | UNKWN | — | UNKWN | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | _ | _ | _ | CAN COMM CIRCUIT (U1000) | — |
| IPDM E/R | No individualion | - | UNKWN | UNKWN | - | - | UNKWN | — | — | — | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | |
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Case 7

Check BCM circuit. Refer to LAN-125, "BCM Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOF | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|------------------------------|----------------------------|
| SELECT SYSTEM | A screen | 1 | - | | | Red | ceive diagn | osis | | | | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | HEODEIO |
| ENGINE | _ | _ | UNKWN | - | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | _ | - | _ | UNKWN | UNKWN | — | CAN COMM CIRCUIT (U1000) | _ |
| BCM | Ng indivation | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | UNKWN | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 1000) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | _ | - | _ | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | - | UNKWN | - | _ | - | CAN COMM CIRCUIT (U 1000) | - |



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Case 8

Check combination meter circuit. Refer to LAN-125, "Combination Meter Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | 1 | T | | | Red | ceive diagn | osis | | | SELE-DIAG | BESULTS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | — | UNKWN | | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U 01) |
| A/T | - | NG | UNKWN | UNKWN | — | - | — | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 100) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | — | - | _ | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No inclusion | - | UNKWN | UNKWN | UNKWN | - | UNKWN | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | _ | - | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | — | — | UNKWN | — | — | - | CAN COMM CIRCUIT (U1000) | _ |
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Case 9

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Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-126</u>, "ABS Actuator and Electric Unit (<u>Control Unit</u>) <u>Circuit Inspection</u>".

| | | | | | CAN DIA | G SUPPO | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|---------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | Iscreen | 1-14-1 | T | | | Red | ceive diagn | osis | | | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | - | _ | _ | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U 000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | _ | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | UNKWN | - | UNKWN | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | - |
| ABS | - | V | UNKWN | UNKWN | UNKWN | UNKWN | _ | _ | - | — | CAN COMM CIRCUIT (U 000) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | — | CAN COMM CIRCUIT (U1000) | _ |



Check IPDM E/R circuit. Refer to LAN-127, "IPDM E/R Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|----------|------------------|----------------------|-----------------------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| | Mecroon | | | | | Red | ceive diagn | osis | | | | |
| | | Initial diagnosis | lransmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | THEODERS |
| ENGINE | - | - | UNKWN | - | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKON | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | _ | - | - | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | _ | - | _ | UNKWN | - | UNKVN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | - | UNKWN | UNK | CAN COMM CIRCUIT (U 100) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | - | — | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | Ng indivation | - | UNKWN | UNKWN | _ | - | UNKWN | _ | - | _ | CAN COMM CIRCUIT (U 000) | _ |
| | | | | | | | | | | | | |
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Case 11

Check CAN communication circuit. Refer to LAN-127, "CAN Communication Circuit Inspection" .

| | | | | | | | | | | | 0 | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------------------|
| | | | - | | CAN DIA | G SUPPOI | RT MNTR | | | | - | |
| SELECT SYSTEM | l screen | Initial | Transmit | | | Red | ceive diagn | osis | | | SELF-DIAG | RESULTS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKWN | - | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKIN | CAN COMM CIRCUIT (U 100) | CAN COMM CIRCUIT (U 101) |
| A/T | - | NG | UNKWN | UNKWN | — | - | _ | UNKWN | UNKWN | — | CAN COMM CIRCUIT (U 000) | _ |
| всм | No inclusion | NG | UNKWN | UNKWN | — | - | — | UNKWN | — | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No individual | _ | UNKWN | UNKWN | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ABS | - | V | UNKWN | UNKWN | UNKWN | UNKWN | — | - | — | — | CAN COMY CIRCUIT (U 000) | _ |
| IPDM E/R | No inclustion | — | UNKWN | UNKWN | — | — | UNKWN | - | — | — | CAN COMM CIRCUIT (U 000) | _ |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | PKIC5636E |

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>A</u> <u>Circuit Inspection</u>".

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | Red | eive diagn | osis | | | | BESHITS |
| | 3010011 | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | _ | _ | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (UN00) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | - | - | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | UNKUN | - | UNKWN | _ | UNKIN | UNKWN | CAN COMM CIRCUIT (U 100) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | Ι | - | - | - | CAN COMM CIRCUIT (U1000) | - |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | _ | CAN COMM CIRCUIT (U1000) | — |

Case 13

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Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|---------------|------------------|-----------|-----------|-------|---------|----------|-------------|---------------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | Initial | Tronomit | | | Red | ceive diagn | osis | | | SELE-DIAG | BESULTS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | - | NG | UNKWN | - | - | _ | - | - | UNKWN | _ | CAN COMM CIRCUIT (U 000) | - |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | — | UNKWN | UNKWN | UNKWN | Ι | UNKWN | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| ABS | - | NG | UNKWN | - | UNKWN | - | - | - | - | - | CAN COMM CIRCUIT (U 100) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | Ι | - | UNKWN | _ | - | _ | CAN COMM CIRCUIT (U1000) | — |

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| CAN SYSTEM (TYPE 3) | PFP:23710 |
| Component Parts and Harness Connector Location | UKS00546 |
| Refer to LAN-21, "Component Parts and Harness Connector Location". | |
| Schematic | UKS00547 |
| Refer to LAN-22, "Schematic". | |
| Wiring Diagram — CAN — | UK\$00548 |
| Refer to LAN-23, "Wiring Diagram — CAN —". | |

Check Sheet

NOTE:

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

| BELECT SYSTEM screen SELF-DIAG RESULTS Sele Marken Marken< | SELECT SYSTEM series Initial diagnosis Tenentific ECM Ting Tenentific RSIN Tenentific RSIN <thtenentific RSIN<</thtenentific | SELECT SYSTEM kolmen Initial diagnosis Teacher diagnosis Marcher kolmosis Marcher kol | SELECT SYSTEM koneen Instantity Tarantity Tarantity <thtarantity< th=""> Tarantity Tara</thtarantity<> | | | | | | CAN DIA | G SUPPO | RT MNTR | | | | | |
|--|---|--|--|-----------------|------------------|-----------|--------------|--------------------|-----------|-------------|---------------|-----------------------|---------------------|---------------|-----------------------------|-----------------------------|
| diagnosis diagnosis ECM STRG BCM (METER) WD/WWD (WR/WN CAN COMM CIRCUT (U1000) INGINE - - UNKWN CAN COMM CIRCUT (U1000) - - UNKWN UNKWN - - UNKWN UNKWN - - UNKWN UNKWN - - UNKWN UNKWN - - 0 - 0 | diagnosis diagnosis ECM STRg BCM MMTER Market Amounty VACCTOS VACCTOS PE/R A NGINE - - UNKWN - - UNKWN - - UNKWN - - - UNKWN - - - UNKWN - - - - CAN COMM CIRCUT - - - - CAN COMM CIRCUT - - - - - CAN COMM CIRCUT - - - - - - - - - - - - - - < | Image: Section of the sectio | diagnosis diagnosis Colu STIDE MOLTER Antowno VSC/TES IPCM NSINE - - UNKWN - - UNKWN - - UNKWN UNKWN - - UNKWN UNKWN - - - UNKWN - - - UNKWN - - UNKWN - - - UNKWN - | SELECT SYSTEM | screen | Initial | Transmit | | | Red | ceive diagn | osis | | | SELF-DIAG | G RESULTS |
| NGINE - - UNKWN UNKWN UNKWN UNKWN CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT UNKWN UNKWN CAN COMMICIRCUT CAN COMMICIRCUT UNKWN UNKWN UNKWN CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT CAN COMMICIRCUT UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN | NGINE - - UNKWN UNKWN </td <td>Noine - - University University University University University Control of the control of the</td> <td>Naime - - Unkown Un</td> <td></td> <td></td> <td>diagnosis</td> <td>diagnosis</td> <td>ECM</td> <td>STRG</td> <td>BCM /SEC</td> <td>METER /M&A</td> <td>AWD/4WD</td> <td>VDC/TCS /ABS</td> <td>IPDM E/R</td> <td></td> <td></td> | Noine - - University University University University University Control of the | Naime - - Unkown Un | | | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| CM ING UNKWN UNKWN - - UNKWN CAN COMM CIRCUIT - ETER ING - UNKWN UNKWN - UNKWN UNKWN CAN COMM CIRCUIT - LLMODE AWD/MWD - NG UNKWN UNKWN - UNKWN - UNKWN CAN COMM CIRCUIT - LLMODE AWD/MWD - NG UNKWN UNKWN - UNKWN - UNKWN - - UNKWN CAN COMM CIRCUIT - LLMODE AWD/MWD - NG UNKWN UNKWN - - UNKWN - - - UNKWN CAN COMM CIRCUIT - - - CAN COM COMM CIRCUIT - - - - - - CAN COM COM CIRCUIT - - - - - - CAN COM COM CIRCUIT - - - - - - - - - - - - - - | CM No UNKWN UNKWN - - UNKWN CA CA COMM CREAT - ETER No - UNKWN UNKWN - UNKWN - - UNKWN UNKWN - UNKWN CAN COMM CREAT - - UNKWN CAN COMM CREAT - - UNKWN - - - UNKWN - - - UNKWN - - - - CAN COMM CREAT - - 0 CAN COMM CREAT - - 0 CAN COMM CREAT - - 0 CAN COM CREAT - CAN COM CREAT - | CAL ING UNKOWN - - - UNKOWN CAL COMM CRCUT - ETER ING UNKOWN UNKOWN UNKOWN - UNKOWN GAN COMM CRCUT - 1. MODE ANDARO - ING UNKOWN UNKOWN UNKOWN - - UNKOWN GAN COMM CRCUT - 1. MODE ANDARO - ING UNKOWN UNKOWN UNKOWN - - CAN COMM CRCUT - BS - ING UNKOWN UNKOWN UNKOWN - - - CAN COMM CRCUT - - - CAN COMM CRCUT - - - UNKOWN - - - CAN COMM CRCUT - CAN COMM CRCUT - CAN COMM CRCUT - CAN COMM CRCUT - CAN COMM C | CM Indication NG UNKWN - - UNKWN - - UNKWN - - UNKWN - - UNKWN - | NGINE | _ | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| INCODE INSURAN - UNKWN - - UNKWN UNKWN CAN COMM CIRCUIT - LL MODE AWDJAWD - NG UNKWN UNKWN - - - UNKWN - - - CAN COMM CIRCUIT - - - - CAN COMM CIRCUIT - - - - CAN COMM CIRCUIT - - - CAN COMM CIRCUIT - - - CAN COM CIRCUIT - - UNKWN - UNKWN - UNKWN - UNKWN - UNKWN - | HETER Modestion - UNKWN - - UNKWN CAN COMM CRECUT - LL MODE AWD4WD - NG UNKWN UNKWN - UNKWN CAN COMM CRECUT - LL MODE AWD4WD - NG UNKWN UNKWN - UNKWN - CAN COMM CRECUT - USB - NG UNKWN UNKWN - - UNKWN - CAN COMM CRECUT - - SE - NG UNKWN UNKWN - - - - CAN COMM CRECUT - - CAN COMM CRECUT - - CAN COMM CRECUT CAN CAN CRECUT CAN CAN CREUT CAN CAN CAN CREUT CAN CAN CAN CREA | HETER No - UNKOWN - - UNKOWN CAN COMM CREUT - LL MODE AND/ANDO - NS UNKOWN UNKOWN - - UNKOWN - CAN COMM CREUT - BS - NS UNKOWN UNKOWN UNKOWN - - UNKOWN - CAN COMM CREUT - ass - NS UNKOWN UNKOWN - - UNKOWN - CAN COMM CREUT - apple ER NS - UNKOWN UNKOWN - UNKOWN - - CAN COMM CREUT - ymptoms: - - - - CAN COMM CREUT - - CAN COM CREUT CAN COM CREUT CAN COM CREUT - | Interest indicator - UNKOWN UNKOWN - UNKOWN UNKOWN - UNKOWN UNKOWN <td>СМ</td> <td>No indication</td> <td>NG</td> <td>UNKWN</td> <td>UNKWN</td> <td>_</td> <td>_</td> <td>UNKWN</td> <td>_</td> <td>_</td> <td>UNKWN</td> <td>CAN COMM CIRCUIT (U1000)</td> <td>_</td> | СМ | No indication | NG | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| LL MODE AWDUWD - NG UNKWN UNKWN UNKWN - UNKWN - UNKWN - CAN COMM CIRCUIT - UNKWN - CAN COMM CIRCUIT - UNKWN UNKWN CAN COMM CIRCUIT | LL MODE AWDIAWO - NG UNIXWN UNIXWN UNIXWN - UNIXWN UNIXWN CAN COMM CIRCUT - BS - NG UNIXWN UNIXWN UNIXWN - UNIXWN - UNIXWN UNIXWN CAN COMM CIRCUT - 'DM E/R Ng Commentation - UNIXWN UNIXWN - UNIXWN | LL MODE ANNDAWAD INS UNKVINI UNKVINI - - UNKVINI - - CAN COMM CRECUT - ISS - INS UNKVINI UNKVINI UNKVINI - - - CAN COMM CRECUT - ISS - INS UNKVINI UNKVINI UNKVINI - - - - CAN COMM CRECUT - ISS - INS UNKVINI UNKVINI UNKVINI - - - - CAN COMM CRECUT - Indication - UNKVINI UNKVINI - UNKVINI - - - CAN COMM CRECUT - | LL MODE AND/AWNO NG UNKOWN UNKOWN UNKOWN UNKOWN - OKANO CARCUT - BS - NG UNKOWN UNKOWN UNKOWN - UNKOWN UNKOWN | ETER | No indication | - | UNKWN | UNKWN | - | UNKWN | - | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| Lass - NG UNKWN UNKWN - - UNKWN - - CAN COMM CIRCUIT - PDM E/R No - UNKWN UNKWN - UNKWN - - - CAN COMM CIRCUIT - Symptoms : - - - - - CAN COMM CIRCUIT - Symptoms : - - - - - CAN COMM CIRCUIT - Symptoms : - - - - - CAN COMM CIRCUIT - | Lass - NG UNKWN UNKWN - - - CAN COUND (CIRCUIT) - PDM E/R NO - UNKWN UNKWN - - - - CAN COUND (CIRCUIT) - Wightoms : - - - - - - CAN COUND (CIRCUIT) - Wightoms : - - - - - CAN COUND (CIRCUIT) - Attach copy of SELECT SYSTEM - - - - CAN COUND (CIRCUIT) - | Ises - NG UNKWN UNKWN - - - CAN COMM COROUT - PpM ER No - UNKWN UNKWN - UNKWN - - - - CAN COMM COROUT - symptoms : - | Ises - NG UNKUWN UNKUWN UNKUWN UNKUWN CAR CUDIOSCIT - PDM EIR N - UNKUWN UNKUWN - UNKUWN CAR CUDIOSCIT Symptoms : Attach copy of SELECT SYSTEM | LL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | _ | _ | UNKWN | - | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| POM EIR <u>No</u> Indication – UNKWN UNKWN – UNKWN – – – – – – – CAN COUMR CHOUT – Symptoms : Attach copy of SELECT SYSTEM Attach copy of SELECT SYSTEM | POM EIR <u>No</u> <u>-</u> UNKWN UNKWN <u>-</u> UNKWN <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>CAN COMM CIRCUI</u> <u>-</u> Symptoms : Attach copy of SELECT SYSTEM Attach copy of SELECT SYSTEM | PEMERIAN INVERSE INVER | pom ER <u>no -</u> UNKWN UNKWN - UNKWN (CAN COMM CHOUT) | NBS | _ | NG | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | _ | _ | CAN COMM CIRCUIT (U1000) | _ |
| Symptoms : Attach copy of SELECT SYSTEM Attach copy of SELECT SYSTEM | Symptoms : Attach copy of SELECT SYSTEM Attach copy of SELECT SYSTEM | Symptoms : Attach copy of SELECT SYSTEM Attach Copy of SELECT SYSTEM | Symptoms : Attach copy of SELECT SYSTEM | PDM E/R | No indication | - | UNKWN | UNKWN | - | UNKWN | - | - | - | - | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | Atta SELE | ich copy CT SYS | of TEM | | | A [.] SEL | ttach cop ECT SY | oy of STEM | | |
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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 data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-121</u>, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".

| | | | | | CAN DIA | G SUPPOF | RT MNTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | Rec | eive diagn | osis | | | | BESUITS |
| | 3010011 | Initial diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SEE -DIAC | TILOULIO |
| ENGINE | _ | _ | UNKWN | - | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| BCM | No indication | NG | UNKWN | UNKWN | _ | - | UNKWN | _ | — | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | _ | UNKWN | | — | UNKWN | UNKWN | CAN COMMCIRCUIT (UN00) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | _ | - | UNKWN | _ | UNKWN | — | | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | - | | - | — | CAN COMMCIRCUIT (UN00) | _ |
| IPDM E/R | No indivation | _ | UNKWN | UNKWN | _ | UNKWN | _ | - | - | — | CAN COMM/CIRCUIT (UN00) | — |



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Check ECM circuit. Refer to LAN-122, "ECM Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|------------------|------------------|-----------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | 1 | Transit | | | Red | ceive diagn | osis | | | SELE-DIAG | BESUITS |
| | olicon | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | _ | _ | UNKIN | _ | — | UNKIN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (U1001) |
| ВСМ | No indication | NG | UNKWN | UNKWN | — | _ | UNKWN | — | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | — | UNKWN | — | — | UNKWN | UNKWN | CAN COMMCIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | — | — | UNKWN | — | UNKWN | — | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | — | - | UNKWN | - | - | CAN COMMCIRCUIT (U1000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | — | UNKWN | — | — | _ | - | CAN COMMCIRCUIT (U1000) | _ |
| | | | | | | | | | | | | |
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Case 3

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Check steering angle sensor circuit. Refer to LAN-124, "Steering Angle Sensor Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|------------------|------------------|----------------------|-----------------------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | Rec | eive diagn | osis | | | | RESULTS |
| SELECT STOLEN | screen | Initial diagnosis | lransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | TRESOEIS |
| ENGINE | _ | _ | UNKWN | - | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | - | UNKWN | 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 | UNKIN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | - |
| PDM E/R | No indication | — | UNKWN | UNKWN | _ | UNKWN | — | — | — | _ | CAN COMM CIRCUIT (U1000) | _ |



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Case 4

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Check data link connector circuit. Refer to LAN-124, "Data Link Connector Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|------------------|-------------------|-----------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1 | T | | | Red | ceive diagn | osis | | | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | _ | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| BCM | No indiviation | NG | UNKWN | UNKWN | — | — | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indiviation | — | UNKWN | 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 | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indivation | — | UNKWN | UNKWN | — | UNKWN | — | | - | - | CAN COMM CIRCUIT (U1000) | _ |
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Case 5

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Check BCM circuit. Refer to LAN-125, "BCM Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|------------------|------------------|-----------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | Rec | eive diagn | osis | | | | BESHITS |
| | 3010011 | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | HEODEIO |
| ENGINE | - | _ | UNKWN | - | _ | | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U0001) |
| BCM | No indivation | NG | UNKWN | UNKWN | _ | - | UNKWN | - | — | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | _ | | _ | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | - |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | _ | — | UNKWN | _ | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | | UNKIN | | _ | — | | CAN COMM CIRCUIT (U 000) | _ |



Case 6

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Check combination meter circuit. Refer to LAN-125, "Combination Meter Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|------------------|------------------|-----------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1-141-1 | T | | | Rec | ceive diagn | osis | | | | |
| | 0010011 | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | TLEODERO |
| ENGINE | — | — | UNKWN | — | — | UNKWN | UNKIN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN001) |
| ВСМ | No indication | NG | UNKWN | UNKWN | _ | _ | UNKIN | _ | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indivation | _ | UNKWN | UNKWN | _ | UNKWN | _ | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | _ | _ | UNKWN | _ | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| ABS | _ | NG | UNKWN | UNKWN | UNKWN | - | _ | UNKWN | _ | _ | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | |
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Case 7

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Check transfer control unit circuit. Refer to LAN-126, "Transfer Control Unit Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|------------------|------------------|----------------------|-----------------------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | Rec | eive diagn | osis | | | | RESULTS |
| SELECT STOLEN | screen | Initial diagnosis | lransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | TRESOEIS |
| ENGINE | _ | _ | UNKWN | _ | _ | UNKWN | UNKWN | | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U0001) |
| BCM | No indication | NG | UNKWN | UNKWN | _ | - | UNKWN | _ | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | Ι | UNKWN | - | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | _ | - | UNKIN | _ | UNKIN | | CAN COMM CIRCUIT (UN000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | — | UNKIN | - | - | CAN COMM CIRCUIT (U 000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | _ | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT (U1000) | — |



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Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-126</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

| SELECT SYSTEM screen | | CAN DIAG SUPPORT MNTR | | | | | | | | | | |
|----------------------|------------------|-----------------------|-----------------------|-------------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| | | Initial diagnosis | Transmit diagnosis | Receive diagnosis | | | | | | | SELE-DIAG BESULTS | |
| | | | | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | _ | — | UNKWN | | — | UNKWN | UNKWN | UNKWN | | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UV001) |
| BCM | No indication | NG | UNKWN | UNKWN | — | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | — | UNKWN | — | - | | UNKWN | CAN COMM CIRCUIT (U 000) | - |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | — | - | UNKWN | - | | 1 | CAN COMM CIRCUIT (U 000) | _ |
| ABS | - | V | | UNKWN | UNKWN | _ | - | | - | - | CAN COMM CIRCUIT (U 000) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | - | UNKWN | - | - | — | - | CAN COMM CIRCUIT (U1000) | _ |


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Case 9

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Check IPDM E/R circuit. Refer to LAN-127, "IPDM E/R Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|------------------|-------------------|----------------------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1 | T | | | Rec | eive diagn | osis | | | SELE-DIAG | BESUITS |
| | 3010011 | lnitial diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | I LOOLIO |
| ENGINE | - | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U0001) |
| BCM | No indication | NG | UNKWN | UNKWN | _ | - | UNKWN | - | - | UNIOWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | - | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | - | — | UNKWN | - | UNKWN | 1 | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No inditiation | _ | UNKWN | UNKWN | _ | UNKWN | _ | - | - | _ | CAN COMM CIRCUIT (U 000) | — |



Case 10

Check CAN communication circuit. Refer to LAN-127, "CAN Communication Circuit Inspection" .

| | | | | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|------------------|-------------------|-----------|-----------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|-----------------------------|
| SELECT SYSTEM | screen | Initial | Transmit | | | Rec | eive diagn | osis | - | | SELE-DIAG | |
| | | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | _ | UNKWN | - | _ | UNKIN | UNKWN | | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN001) |
| всм | No inditation | NG | UNKWN | UNKWN | _ | — | UNKWN | - | — | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indition | — | UNKWN | UNKWN | 1 | UNKWN | - | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | - | — | UNKWN | — | UNKWN | 1 | CAN COMPI CIRCUIT (U 000) | _ |
| ABS | - | V | | UNKWN | | — | - | | — | 1 | CAN COMPLCIRCUIT (U 000) | _ |
| IPDM E/R | No inditiation | — | UNKWN | UNKWN | 1 | UNKWN | | _ | — | 1 | CAN COMPLCIRCUIT (U 000) | _ |
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Case 11

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection"</u>.

| | | | | | CAN DIA | G SUPPOR | RT MNTR | | | | | |
|------------------|------------------|----------------------|-----------------------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|-----------------------------|
| | screen | | - | | | Rec | eive diagn | osis | | | | |
| SELECT STOTEM | screen | Initial diagnosis | Iransmit diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | I NESOEIS |
| ENGINE | _ | _ | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN001) |
| BCM | No indication | NG | UNKWN | UNKWN | _ | — | UNKWN | - | — | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | _ | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | _ | — | UNKWN | _ | UNKWN | - | CAN COMPI CIRCUIT (U 000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | _ | UNKWN | - | _ | — | _ | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | PKIC5813E |

Case 12

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Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

| | | | | | CAN DIA | G SUPPOI | RT MNTR | | | | | |
|------------------|------------------|-----------|----------------------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1-14-1 | T oo oo oo it | | | Red | ceive diagn | osis | | | SELE-DIAG | BESULTS |
| | 0010011 | diagnosis | diagnosis | ECM | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | TILOULIO |
| ENGINE | - | — | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| всм | No indication | NG | UNKWN | UNKWN | l | — | UNKWN | — | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | | UNKWN | — | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | | — | UNKWN | — | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| ABS | — | NG | UNKWN | - | 1 | — | — | — | — | — | CAN COMPLCIRCUIT (U 000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | | UNKWN | — | — | _ | - | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | PKIC5814E |

| | [CAN] |
|--|---------------|
| CAN SYSTEM (TYPE 4) | PFP:23710 |
| Component Parts and Harness Connector Location | A UKS0054A |
| Refer to LAN-21, "Component Parts and Harness Connector Location". | |
| Schematic | UK\$0054B |
| Refer to LAN-22, "Schematic". | |
| Wiring Diagram — CAN — | UKS0054C C |
| Refer to LAN-23, "Wiring Diagram — CAN —". | |
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Check Sheet

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

| | | | | 1 | CAN | DIAG SUF | PPORT MI | NTR | | | | | |
|-----------------|------------------|-----------|-----------|---------------------|-----------------|----------|-------------|---------------|--------------|-----------------|--------------|-----------------------------|---------------------------|
| SELECT SYSTEM | screen | Initial | Transmit | | | | Receive | diagnosis | | | | SELF-DIAC | G RESULTS |
| | | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| INGINE | - | 1 | UNKWN | - | — | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCU (U1001) |
| DIFF LOCK | - | NG | UNKWN | UNKWN | _ | - | - | — | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | — | - | - | UNKWN | — | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| IETER | No indication | - | UNKWN | UNKWN | _ | - | UNKWN | _ | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| LL MODE AWD/4WD | - | NG | UNKWN | UNKWN | _ | - | _ | UNKWN | _ | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| NBS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | _ | - | CAN COMM CIRCUIT (U1000) | _ |
| PDM E/R | No indication | - | UNKWN | UNKWN | — | - | UNKWN | - | — | — | — | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | | |
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| | | | A SE | Attach co LECT S | opy of YSTEM | | | | Atta SELE | ach copy | / of STEM | | |
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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 data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> 121, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".

| | | | | | CAN | DIAG SUP | PPORT M | NTR | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1 | T | | | | Receive | diagnosis | | | | | BESUITS |
| | obreen | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | — | - | UNKWN | — | - | — | UNKWN | UNKWN | UNKWN | | UNKIN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN001) |
| DIFF LOCK | — | NG | UNKWN | UNKWN | - | — | — | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 000) | — |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKIN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | - | UNKWN | UNKWN | - | _ | UNKWN | _ | _ | UNKWN | UNKIN | CAN COMM CIRCUIT (U 000) | _ |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | — | — | - | UNKWN | _ | | - | CAN COMM CIRCUIT (U 000) | — |
| ABS | — | NG | UNKWN | UNKWN | | UNKWN | - | 1 | UNKWN | — | | CAN COMM CIRCUIT (U 000) | — |
| IPDM E/R | No indivision | - | UNKWN | UNKWN | — | — | UNKWN | - | — | — | - | CAN COMM CIRCUIT (U 000) | — |



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Case 2

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Check ECM circuit. Refer to LAN-122, "ECM Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | | |
| SELECT STOTEM | 3018611 | lnitial diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | TILOULIO |
| ENGINE | - | - | | - | - | - | | | UNKUN | | | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U 001) |
| DIFF LOCK | — | NG | UNKWN | UNKWN | | _ | — | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (UN000) | _ |
| BCM | No indication | NG | UNKWN | | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | - | _ | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | - | _ | — | UNKWN | — | UNKWN | _ | CAN COMM CIRCUIT (UN000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | - | _ | UNKWN | - | - | - | _ | CAN COMM CIRCUIT (UN000) | — |



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Case 3

Check differential lock control unit circuit. Refer to LAN-123, "Differential Lock Control Unit Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|--------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | 1-22-1 | T | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS |
| OLLEOF OF OF OF LM | ooreen | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUI (U1001) |
| DIFF LOCK | - | NG | UNKWN | UNKWN | _ | _ | _ | _ | UNKIN | | - | CAN COMM CIRCUIT (U 000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | _ | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | 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 | - | - | CAN COMM CIRCUIT (U 000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | UNKWN | - | _ | _ | _ | CAN COMM CIRCUIT (U1000) | _ |



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Case 4

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Check steering angle sensor circuit. Refer to LAN-124, "Steering Angle Sensor Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1-11-1 | T | | | | Receive | diagnosis | | | | | BESHITS |
| SELECT STOTEM | 3016611 | lnitial diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | THEODERS |
| ENGINE | - | - | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| DIFF LOCK | — | NG | UNKWN | UNKWN | | Ι | - | Ι | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | - |
| BCM | No indication | NG | UNKWN | UNKWN | - | Ι | - | UNKWN | - | Ι | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No indication | - | UNKWN | UNKWN | | Ι | UNKWN | Ι | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | – |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | - | Ι | — | UNKWN | - | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | Ι | UNKWN | Ι | - | CAN COMM CIRCUIT (U1000) | - |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | - | _ | CAN COMM CIRCUIT (U1000) | — |



Check data link connector circuit. Refer to LAN-124, "Data Link Connector Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | la Wal | T | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS |
| | obreen | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | _ | - | UNKWN | - | - | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUI (U1001) |
| DIFF LOCK | _ | NG | UNKWN | UNKWN | _ | _ | _ | - | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indivation | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | _ | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No inditation | - | UNKWN | 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 indivation | - | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | - | 1 | CAN COMM CIRCUIT (U1000) | _ |



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Case 6

Check BCM circuit. Refer to LAN-125, "BCM Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| | screen | | | | | | Receive | diagnosis | | | | | |
| SELECT STOTEM | 3018611 | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | THEODERS |
| ENGINE | - | _ | UNKWN | - | _ | _ | | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| DIFF LOCK | - | NG | UNKWN | UNKWN | - | _ | _ | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No inditation | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | - | UNKWN | UNKWN | - | - | UNKWN | _ | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ |
| 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 | _ | _ | UNHWN | - | _ | _ | _ | CAN COMM CIRCUIT | _ |



Check combination meter circuit. Refer to LAN-125, "Combination Meter Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT MI | NTR | | | | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|---------------------------|--|--|--|
| SELECT SYSTEM | screen | Initial | Tronomit | | | | Receive | diagnosis | | | | SELE-DIAG | BESULTS | | | |
| 0111010101011 | ouroon | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | | | | |
| ENGINE | - | - | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCU (Un001) | | | |
| DIFF LOCK | - | NG | UNKWN | UNKWN | _ | _ | _ | - | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ | | | |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | _ | - | UNKWN | CAN COMM CIRCUIT (U1000) | - | | | |
| METER | No indivation | - | UNKWN | UNKWN | - | - | UNKWN | _ | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | _ | | | |
| 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 8

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Check transfer control unit circuit. Refer to LAN-126, "Transfer Control Unit Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | Let Med | T | | | | Receive | diagnosis | | | | SELE-DIAG | RESULTS |
| | | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U0001) |
| DIFF LOCK | Ι | NG | UNKWN | UNKWN | Ι | - | - | - | | UNKWN | Ι | CAN COMM CIRCUIT (Ux000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | _ | _ | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | - | _ | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | Ι | NG | UNKIN | UNKWN | - | - | - | UNKWN | - | UNK | Ι | CAN COMM CIRCUIT (U 000) | — |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U 000) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | - | _ | UNKWN | _ | _ | - | - | CAN COMM CIRCUIT (U1000) | — |



Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-126</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

| CAN DIAG SUPPORT MNTR SELECT SYSTEM screen Transmit diagnosis Transmit diagnosis Transmit ECM DIFF LOCK STRG METER /M&A AWD/4WD VOC/TCS IPDM LOCK SELF-DIAG RESULTS ENGINE — — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U000) — DIFF LOCK — NG UNKWN UNKWN — — — UNKWN UNKWN — CAN COMM CIRCUIT (U000) — BCM No indication NG UNKWN UNKWN — — UNKWN — — UNKWN CAN COMM CIRCUIT (U000) — METER No indication — UNKWN UNKWN — — UNKWN UNKWN CAN COMM CIRCUIT (U000) — ALL MODE AWD/4WD — NG UNKWN UNKWN — — UNKWN — CAN COMM CIRCUIT (U000) | | | | | | | | | | | | | | |
|--|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| BELECT SYSTEM screen Initial diagnosis Transmit diagnosis Transmit diagnosis Transmit diagnosis SELF-DIAG RESULTS ENGINE - - DIFF LOCK STRG BCM //SEC METER //M&A AWD/4WD VDC/TCS IPDM //ABS CAN COMM CIRCUIT (CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U0001) CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U0001) CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U000) CAN COMM CIRCUIT (U0000) CAN COMM CIRCUIT (U0000) </td <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>CAN</td> <td>DIAG SUF</td> <td>PORT M</td> <td>NTR</td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | - | | CAN | DIAG SUF | PORT M | NTR | | | | | |
| Difference Initial diagnosis Initial diagnosis <thinitial diagnosis<="" th=""> Initial di</thinitial> | SELECT SYSTEM | screen | 1-11-1 | T | | | | Receive | diagnosis | | | | | RESULTS |
| ENGINE - - UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) CAN COMM CIRCUIT (U1000) DIFF LOCK - NG UNKWN UNKWN - - - UNKWN UNKWN - CAN COMM CIRCUIT (U000) - BCM No indication NG UNKWN UNKWN - - UNKWN - - UNKWN CAN COMM CIRCUIT (U000) - METER No indication - UNKWN UNKWN - - UNKWN UNKWN - - ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (U1000) - ABS - NG UNKWN UNKWN UNKWN - - UNKWN - - CAN COMM CIRCUIT (U1000) - | | orcen | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| DIFF LOCK - NG UNKWN UNKWN - - - - UNKWN UNKWN - CAN COMM CIRCUIT (UX000) - BCM No indication indication NG UNKWN UNKWN - - UNKWN - - UNKWN CAN COMM CIRCUIT (UX000) - METER No indication - UNKWN UNKWN - - UNKWN UNKWN CAN COMM CIRCUIT (UX000) - ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (UX000) - ABS - No UNKWN UNKWN UNKWN - - UNKWN - - CAN COMM CIRCUIT (UX000) - | ENGINE | - | - | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (Ux001) |
| BCM No indication NG UNKWN UNKWN - - UNKWN - - UNKWN CAN COMM CIRCUIT (U1000) - METER No indication - UNKWN UNKWN - - UNKWN UNKWN CAN COMM CIRCUIT (U000) - ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (U000) - ABS - No UNKWN UNKWN UNKWN - - UNKWN - - CAN COMM CIRCUIT (U000) - | DIFF LOCK | - | NG | UNKWN | UNKWN | — | - | — | - | UNKWN | UNKIN | | CAN COMM CIRCUIT (UN000) | - |
| METER No indication - UNKWN - - UNKWN UNKWN CAN COMM CIRCUIT (UX000) - ALL MODE AWD/4WD - NG UNKWN UNKWN - - UNKWN - CAN COMM CIRCUIT (UX000) - ABS - No UNKWN UNKWN UNKWN - - UNKWN - - CAN COMM CIRCUIT (UX000) - | BCM | No indication | NG | UNKWN | UNKWN | — | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| ALL MODE AWD/4WD - NG UNKWN - - - UNKWN - CAN COMM CIRCUIT (U0000) - ABS - No UNKVN UNKVN - - UNKVN - - CAN COMM CIRCUIT (U0000) - | METER | No indication | — | UNKWN | UNKWN | - | - | UNKWN | 1 | _ | UNKIN | UNKWN | CAN COMM CIRCUIT (UN000) | - |
| ABS - NO UNKOW UNKOW UNKOW UNKOW UNKOW CAN COMM CIRCUIT (UM00) | ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | — | — | — | UNKWN | _ | UNKVN | _ | CAN COMM CIRCUIT (UN000) | _ |
| | ABS | _ | N | UNKIN | UNKWN | UNKWN | UNKWN | — | - | UNKWN | 1 | _ | CAN COMM CIRCUIT (UN000) | |
| IPDM E/R ING UNKWN UNKWN < | IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT (U1000) | |
| | | | | | | | | | | | | | | PKIC5824E |



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Case 10

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Check IPDM E/R circuit. Refer to LAN-127, "IPDM E/R Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1-11-1 | T | | | | Receive | diagnosis | | | | | RESULTS |
| | obiech | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | UNKWN | | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U0001) |
| DIFF LOCK | — | NG | UNKWN | UNKWN | | Ι | - | | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | Ι | - | UNKWN | - | Ι | | CAN COMM CIRCUIT (U1000) | — |
| METER | No indication | - | UNKWN | UNKWN | | Ι | UNKWN | - | - | UNKWN | | CAN COMM CIRCUIT (UN000) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | — |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | Ι | Ι | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No individual | - | UNKWN | UNKWN | - | _ | UNKWN | _ | - | - | Ι | CAN COMM CIRCUIT (UN000) | — |



Case 11

Check CAN communication circuit. Refer to LAN-127, "CAN Communication Circuit Inspection" .

| | | | | | CAN | DIAG SUF | PORT M | NTR | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1-11-1 | T | | | | Receive | diagnosis | | | | | BESUITS |
| | ooreen | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | TILOULIO |
| ENGINE | — | - | UNKWN | - | - | — | UNKWN | UNION | UNIWN | | | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN001) |
| DIFF LOCK | _ | NG | UNKWN | UNKIN | Ι | — | | - | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U)000) | _ |
| BCM | No inditation | NG | UNKWN | UNKWN | - | — | | UNKWN | - | I | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indivision | - | UNKWN | UNKWN | _ | — | UNKWN | — | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | — |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKIN | _ | _ | - | UNHWN | _ | UNKWN | - | CAN COMM CIRCUIT (UN000) | _ |
| ABS | — | V | UNKIN | UNKIN | UNKWN | UNHWN | — | — | UNKWN | - | - | CAN COMM CIRCUIT (UN000) | _ |
| IPDM E/R | No inditation | - | UNKWN | UNKWN | - | — | UNKWN | - | _ | Ι | Ι | CAN COMM CIRCUIT (U)000) | _ |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PKIC5826E |

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Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

| | | | | | CAN | DIAG SUF | PORT MI | NTR | | | | | | | | |
|------------------|------------------|-----------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|--|--|--|
| SELECT SYSTEM | screen | Initial | Transmit | | | | Receive | diagnosis | | | | SELE-DIAG | BESULTS | | | |
| | | diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | | | | |
| ENGINE | - | - | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U0001) | | | |
| DIFF LOCK | - | NG | UNKWN | UNKWN | _ | _ | _ | - | UNKWN | UNKWN | - | CAN COMPLCIRCUIT (U 000) | _ | | | |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | — | | | |
| METER | No indication | - | UNKWN | UNKWN | - | - | UNKWN | - | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | - | | | |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | — | — | — | UNKWN | — | UNKWN | 1 | CAN COMM CIRCUIT (U)000) | _ | | | |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ | | | |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | - | UNKWN | _ | _ | _ | - | CAN COMM CIRCUIT (U1000) | — | | | |

Case 13

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

| | | | | | CAN | DIAG SUR | PORT MI | NTR | | | | | | | |
|------------------|------------------|----------------------|-----------|-------|--------------|----------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|--|--|
| SELECT SYSTEM | screen | 1 | T | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS | | |
| SELECT STOTEM | 3010011 | Initial diagnosis | diagnosis | ECM | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | | | |
| ENGINE | - | - | UNKWN | - | | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUI (U1001) | | |
| DIFF LOCK | - | NG | UNKWN | UNKWN | - | _ | - | _ | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ | | |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ | | |
| METER | No indication | - | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ | | |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | - | — | - | UNKWN | _ | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ | | |
| ABS | - | NG | UNKWN | - | - | - | - | - | - | - | - | CAN COMM CIRCUIT (U 000) | _ | | |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | - | _ | UNKWN | - | _ | _ | _ | CAN COMM CIRCUIT (U1000) | _ | | |

| | [CAN] |
|--|---------------|
| CAN SYSTEM (TYPE 5) | PFP:23710 |
| Component Parts and Harness Connector Location | A UKS0054E |
| Refer to LAN-21, "Component Parts and Harness Connector Location". | |
| Schematic | UKS0054F |
| Refer to LAN-22, "Schematic". | |
| Wiring Diagram — CAN — | UKS0054G C |
| Refer to LAN-23, "Wiring Diagram — CAN —". | |
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Check Sheet

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

| Check sheet table | e | | | | CAN | | | | | | | | |
|-------------------|------------------|----------------------|-----------------------|--------------------|----------------|---------|-------------|---------------|--------------|-------------------|-------------|-----------------------------|----------------------------|
| | | | | | CAN | DIAG SU | Receive | diagnosis | | | | | |
| SELECT SYSTEM | screen | Initial diagnosis | Transmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELF-DIAG | RESULIS |
| ENGINE | - | I | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUI (U1001) |
| A/T | - | NG | UNKWN | UNKWN | - | _ | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | _ | - | UNKWN | _ | _ | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | 1 | UNKWN | UNKWN | UNKWN | - | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | - | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| ABS | Ι | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | _ | UNKWN | _ | | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | | UNKWN | UNKWN | - | _ | UNKWN | — | - | — | Ι | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | | |
| | | | At SEL | tach col ECT SY | py of ′STEM | | | | Atta SELE | ch copy CT SYS | of TEM | | |
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CHECK SHEET RESULTS (EXAMPLE)

NOTE:

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

Case 1

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Check harness between TCM and data link connector. Refer to <u>LAN-120, "Inspection Between TCM and Data</u> <u>Link Connector Circuit"</u>.

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|------------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|----------------------------|
| SELECT SYSTEM | screen | lociti e l | T | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKWN | - | UNKWN | — | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | — | - | — | UNKWN | UNKWN | UNKWN | — | CAN COMM CIRCUIT (U 1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | — | — | | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | UNKWN | _ | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 1000) | _ |
| ALL MODE AWD/4WD | | NG | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | UNKWN | - | CAN COMM CIRCUIT (U 000) | — |
| ABS | _ | NG | UNKWN | UNKWN | UNKWN | UNKWN | _ | _ | UNKWN | - | - | CAN COMM CIRCUIT (U 000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | — | - | UNKWN | - | — | — | — | CAN COMM CIRCUIT (U 000) | _ |
| | | | | | | | | | | | | | |
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Case 2

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Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> <u>121, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | | RESULTS |
| SELECT STOTEN | Sercen | initial diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | THEODERO |
| ENGINE | _ | - | UNKWN | - | UNKWN | — | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMIN CIRCUIT (UN01) |
| A/T | — | NG | UNKWN | UNKWN | _ | — | _ | UNKWN | UNKWN | UNKWN | — | CAN COMM CIRCUIT (U 1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | — | UNKWN | _ | CAN COMIL CIRCUIT (U 100) | - |
| ABS | - | NG | UNKWN | UNKWN | | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U 100) | - |
| IPDM E/R | No inclusion | - | UNKWN | UNKWN | _ | - | UNKWN | _ | _ | - | _ | CAN COMM CIRCUIT (U 100) | — |



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Check ECM circuit. Refer to LAN-122, "ECM Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|----------------------|-----------------------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|----------------------------|
| | screen | | | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS |
| | 3010011 | initial diagnosis | lransmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI -DIAC | |
| ENGINE | _ | _ | UNKWN | _ | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (UN00) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | | — | - | - | UNKWN | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U 000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | _ | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | - |
| ALL MODE AWD/4WD | - | NG | UNKWN | | UNKWN | — | — | UNKWN | - | UNKWN | — | CAN COMM CIRCUIT (U 1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | _ | CAN COMM CIRCUIT (U 1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | - | UNKWN | - | _ | - | _ | CAN COMM CIRCUIT (U 1000) | _ |
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Case 4

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Check TCM circuit. Refer to LAN-123, "TCM Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT M | INTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | | BESUITS |
| | ooroon | initiai diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | - | — | UNKWN | - | UNKWN | — | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U 000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | | - | - | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 000) | _ |
| всм | No indication | NG | UNKWN | UNKWN | - | - | — | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKWN | - | — | UNKWN | _ | UNKWN | — | CAN COMINCIRCUIT (U 1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | — | - | UNKWN | _ | — | CAN COMM CIRCUIT (U 1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | - | UNKWN | | _ | - | _ | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PKIC5677E |



М

Check steering angle sensor circuit. Refer to LAN-124, "Steering Angle Sensor Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|----------------------|-----------------------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|---------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS |
| SELECT STOTEM | 3016611 | Initial diagnosis | Iransmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | THEODER'S |
| ENGINE | - | _ | UNKWN | - | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCU (U1001) |
| A/T | _ | NG | UNKWN | UNKWN | _ | - | _ | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | - |
| BCM | No indication | NG | UNKWN | UNKWN | _ | - | _ | UNKWN | - | _ | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | _ | UNKWN | UNKWN | UNKWN | _ | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | - | NG | 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 6

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Check data link connector circuit. Refer to LAN-124, "Data Link Connector Circuit Inspection" .

| SELECT SYSTEM scree | n di | Initial | | | | | | | | | | | | |
|---------------------|---------|----------|---|-------|-------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|--|
| | di | initiai | A DECEMBER OF A | | | | Receive of | diagnosis | | | | SELE-DIAG | BESUITS | |
| | | iagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | | |
| ENGINE - | - | - | UNKWN | — | UNKWN | — | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) | |
| А/Т – | - | NG | UNKWN | UNKWN | - | — | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ | |
| BCM Ind | ation | NG | UNKWN | UNKWN | - | — | _ | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ | |
| METER N | ation | - | UNKWN | UNKWN | UNKWN | — | UNKWN | — | Ι | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | — | |
| ALL MODE AWD/4WD - | - | NG | UNKWN | UNKWN | UNKWN | — | - | UNKWN | - | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ | |
| ABS – | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | _ | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ | |
| IPDM E/R Ind | ation | - | UNKWN | UNKWN | - | — | UNKWN | _ | _ | - | - | CAN COMM CIRCUIT (U1000) | - | |



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Check BCM circuit. Refer to LAN-125, "BCM Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|-----------------------|----------------------|-----------------------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| | scroon | | _ | | | | Receive | diagnosis | | | | | |
| OLLEOT OTOTEM | 3010011 | Initial diagnosis | Iransmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | |
| ENGINE | - | - | UNKWN | - | UNKWN | - | UNKINN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U 001) |
| A/T | _ | NG | UNKWN | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| ВСМ | No individualition | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | UNKWN | _ | | | _ | UNKWN | UNKWN | CAN COMICIRCUIT (U 1000) | - |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | UNKWN | — | _ | UNKWN | - | UNKWN | — | CAN COMM CIRCUIT (U1000) | — |
| ABS | — | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | 1 | UNKWN | - | — | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | - | - | UNKIN | | - | - | - | CAN COMM CIRCUIT (U 000) | _ |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PKIC5680E |



Case 8

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Check combination meter circuit. Refer to LAN-125, "Combination Meter Circuit Inspection" .

| r | | | | | | | | | | | | l | |
|------------------|------------------|-----------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| | | | | - | CAN | DIAG SU | PPORT N | INTR | | | | | |
| SELECT SYSTEM | screen | 1 | | | | | Receive | diagnosis | | | | | BESUITS |
| | 0010011 | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DI K | |
| ENGINE | - | — | UNKWN | Ι | UNKWN | | UNKWN | | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | Ι | NG | UNKWN | UNKWN | Ι | Ι | Ι | | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U 200) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | Ι | ١ | Ι | | — | — | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | Notice Notice | — | UNKWN | UNKWN | UNKWN | Ι | UNKWN | Ι | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ALL MODE AWD/4WD | - | NG | 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 | - | I | UNKWN | | — | - | - | CAN COMM CIRCUIT (U1000) | — |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PKIC5681E |



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Check transfer control unit circuit. Refer to LAN-126, "Transfer Control Unit Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | | BESUITS |
| | Sorcen | initial diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | _ | _ | UNKWN | - | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | - | - | - | UNKWN | UNHWN | UNKWN | - | CAN COMM CIRCUIT (U 000) | _ |
| ВСМ | No indication | NG | UNKWN | UNKWN | _ | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | UNKWN | _ | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | | UNKWN | _ | - | UNKWN | - | UNKWN | 1 | CAN COMM CIRCUIT (U 000) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U 000) | - |
| IPDM E/R | No indication | - | UNKWN | UNKWN | — | — | UNKWN | — | - | _ | _ | CAN COMM CIRCUIT (U1000) | _ |



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Case 10

А Check ABS actuator and electric unit (control unit) circuit. Refer to LAN-126, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|----------------------|-----------------------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | | BESUITS |
| SELECT STOTEM | 3016611 | Initial diagnosis | Iransmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | THEODERS |
| ENGINE | _ | - | UNKWN | _ | UNKWN | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (UN01) |
| A/T | _ | NG | UNKWN | UNKWN | _ | _ | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 000) | - |
| BCM | No indication | NG | UNKWN | UNKWN | - | _ | - | UNKWN | _ | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | - |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | _ | UNKWN | _ | CAN COMM CIRCUIT (U 000) | _ |
| ABS | - | V | UNKWN | UNKWN | UNKWN | UNKWN | - | _ | UNION | - | - | CAN COMM CIRCUIT (U 000) | - |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | - | UNKWN | _ | _ | - | _ | CAN COMM CIRCUIT (U1000) | _ |



Case 11

Check IPDM E/R circuit. Refer to LAN-127, "IPDM E/R Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|---------------------|----------------------|-----------------------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|------------------------------|
| | screen | | | | | | Receive | diagnosis | | | | | |
| SELECT STOTEM | 3016611 | Initial diagnosis | Iransmit diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAC | |
| ENGINE | - | - | UNKWN | - | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | | CAN COMM CIRCUIT (U1000) | CAN COMIN CIRCUIT (U 101) |
| A/T | - | NG | UNKWN | UNKWN | - | - | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | — |
| ВСМ | No indication | NG | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | UNKWN | _ | UNKWN | | - | UNKWN | | CAN COMICIRCUIT (U 100) | _ |
| ALL MODE AWD/4WD | | NG | UNKWN | UNKWN | UNKWN | — | - | UNKWN | - | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | — | 1 | UNKWN | — | _ | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | Ny individuation | — | UNKWN | UNKWN | — | — | UNKWN | | - | — | — | CAN COMM CIRCUIT (U 000) | _ |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PKIC5684E |



Case 12

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|------------------|---------------------|-----------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|---------------------------|
| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
| SELECT SYSTEM | screen | Initial | | | | | Receive | diagnosis | | | | SELE-DIAG | BESUITS |
| | 0010011 | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | — | - | UNKWN | — | UNKWN | - | | UNKIN | UNKWN | | | CAN COMM CIRCUIT (U 000) | CAN COMICIRCUIT (UN01) |
| A/T | — | NG | UNKWN | | - | 1 | 1 | UNKINN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U 000) | _ |
| ВСМ | No individuation | NG | UNKWN | UNKWN | _ | - | | UNKWN | _ | | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | UNKWN | - | UNKWN | | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U 1000) | — |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | UNKWN | 1 | | UNKWN | | UNKWN | - | CAN COMM CIRCUIT (U N00) | — |
| ABS | — | V | UNKWN | UNKWN | UNKWN | UNKWN | I | - | | Ι | - | CAN COMM CIRCUIT (U 100) | _ |
| IPDM E/R | No individuation | — | UNKWN | UNKWN | — | - | UNKWN | - | | | Ι | CAN COMM CIRCUIT (U 000) | _ |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | PKIC5685E |

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Case 13

А Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to LAN-128, "IPDM E/R Ignition Relay Circuit Inspection" .

| | | | | | CAN | DIAG SU | PPORT N | INTR | | | | | |
|------------------|------------------|----------------------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | | Receive | diagnosis | | | | | BESUITS |
| | 3010011 | initial diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | _ | _ | UNKWN | _ | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (UV00) | CAN COMM CIRCUIT (UN01) |
| A/T | _ | NG | UNKWN | UNKWN | - | I | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | — | UNKWN | UNKWN | | Ι | UNKWN | _ | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U 100) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKWN | | | UNKWN | — | UNKWN | - | CAN COMICIRCUIT (U 100) | — |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | Ι | _ | UNKWN | - | _ | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | - | Ι | UNKWN | — | _ | - | - | CAN COMM CIRCUIT (U1000) | — |

Case 14

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Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-128, "IPDM E/R Ignition Relay Circuit Inspection" .

| | | | | | CAN | DIAG SL | PPORT N | INTR | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|---------|-------------|---------------|---------|-----------------|-------------|------------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1-14-1 | T | | | | Receive | diagnosis | | | | SELE-DIAG | |
| | boroom | diagnosis | diagnosis | ECM | тсм | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | - | - | UNKWN | - | UNKWN | - | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | _ | NG | UNKWN | - | - | - | - | _ | - | UNKWN | - | CAN COMM CIRCUIT (U 000) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | - | _ | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | - | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | - | UNKWN | _ | - | - | - | - | - | CAN COMM CIRCUIT (U 1000) | _ |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | 1 | UNKWN | | _ | - | - | CAN COMM CIRCUIT (U1000) | _ |
| | | | | | | | | | | | | | |
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| CAN SYSTEM (TYPE 6) | PFP:23710 |
| Component Parts and Harness Connector Location | UKS00541 |
| Refer to LAN-21, "Component Parts and Harness Connector Location". | |
| Schematic | UKS0054J |
| Refer to LAN-22, "Schematic". | |
| Wiring Diagram — CAN — | UK\$0054K |
| Refer to LAN-23, "Wiring Diagram — CAN —" . | |

Check Sheet

NOTE:

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

| | | | | | C | | SUPPC | ORT MNT | R | | | | | |
|----------------------|------------------|-----------|-----------|-----------------|-----------------|--------------|-------|-------------|---------------|----------------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM screen | | Initial | Tranomit | | | | Rec | eive diag | nosis | | | | SELF-DIAC | G RESULTS |
| | | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| NGINE | _ | _ | UNKWN | _ | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| Т | - | NG | UNKWN | UNKWN | _ | — | — | _ | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | - |
| FF LOCK | - | NG | UNKWN | UNKWN | - | _ | _ | _ | _ | UNKWN | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| M | No indication | NG | UNKWN | UNKWN | _ | _ | _ | - | UNKWN | - | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ETER | No indication | _ | UNKWN | UNKWN | UNKWN | _ | _ | UNKWN | _ | _ | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| LL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| BS | — | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | - | _ | UNKWN | _ | _ | (U1000) | - |
| DM E/R | No indication | - | UNKWN | UNKWN | — | - | - | UNKWN | _ | — | _ | | CAN COMM CIRCUIT (U1000) | - |
| | | | s | Attach ELECT | copy o SYSTE | f EM | | | | Attac SELEC | h copy T SYS | of TEM | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | PKIC5857E |

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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 <u>LAN-120</u>, "Inspection Between TCM and Data <u>Link Connector Circuit</u>".

| | | | | C | | | | | | | | | | |
|----------------------|------------------|----------------------|-----------------------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM screen | | | | | | | Rece | | | | | | | |
| | | Initial diagnosis | Transmit diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | SELI-DIAG RESULIS | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | _ | _ | UNKIN | UNK | UNKIN | UNK | UNKVN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUIT (U1001) |
| A/T | - | NG | UNKWN | UNKWN | - | — | — | — | UNKWN | UNKWN | UNKIN | - | CAN COMM CIRCUIT (U N00) | _ |
| DIFF LOCK | - | NG | UNKWN | UNKIN | — | - | - | — | - | UNKWN | UNKWN | - | CAN COMMCIRCUIT (UN00) | _ |
| BCM | No indication | NG | UNKWN | UNKVN | _ | - | _ | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKIN | UNKWN | _ | _ | UNKWN | _ | _ | UNKWN | UNKWN | CAN COMMCIRCUIT (UN00) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKIN | UNKWN | _ | - | - | UNKWN | _ | UNKWN | _ | CAN COMM/CIRCUIT (UN00) | - |
| ABS | - | NG | UNKWN | UNKWN | UNKIN | UNKWN | UNKWN | _ | _ | UNKWN | _ | - | CAN COMM/CIRCUIT (UN00) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | _ | _ | _ | CAN COMM/CIRCUIT (UN00) | _ |



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LAN

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> <u>121, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

| | | | | | C | | | | | | | | | |
|----------------------|------------------|----------------------|-----------------------|-------|-------|--------------|-------|-------------------|---------------|---------|-----------------|-------------|-----------------------------|--------------------------|
| SELECT SYSTEM screen | | 1 | Transmit diagnosis | | | | Rec | SELE-DIAG BESULTS | | | | | | |
| | | Initial diagnosis | | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | - 1 | UNKWN | _ | — | UNKWN | UNKWN | UNKWN | UNKVN | UNKVN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUI (UN01) |
| A/T | — | NG | UNKWN | UNKWN | - | - | - | — | UNKWN | UNKWN | UNKIN | - | CAN COMM CIRCUIT (U N00) | - |
| DIFF LOCK | - | NG | UNKWN | UNKWN | - | - | - | - | - | UNKWN | UNKIN | - | CAN COMM CIRCUIT (U N00) | - |
| всм | No indication | NG | UNKWN | UNKWN | _ | _ | - | _ | UNKWN | - | _ | UNKVN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | _ | UNKWN | UNKWN | UNKWN | _ | — | UNKWN | — | — | | UNK | CAN COMMCIRCUIT (UN00) | - |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKWN | — | - | _ | UNKWN | — | UNK | Ι | CAN COMMCIRCUIT (UN00) | - |
| ABS | - | NG | UNKWN | | | UNK | UNKWN | — | - | UNKIN | - | - | CAN COMMCIRCUIT (U N00) | - |
| IPDM E/R | Notindivation | _ | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | _ | _ | _ | | _ |


CAN SYSTEM (TYPE 6)

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Case 3

Check ECM circuit. Refer to LAN-122, "ECM Circuit Inspection" .

| | | | | | С | AN DIAG | SUPPC | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|---------------------------|
| SELECT SYSTEM | screen | Initial | Transmit | | | | Rec | eive diag | nosis | | - | | SELE-DIAG | BESULTS |
| | | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | | UNKWN | - | UNK | _ | _ | UNKWN | UNK | | UNKVN | UNKVN | CAN COMMCIRCUIT (U N00) | CAN COMMCIRCUIT (UN01) |
| A/T | - | NG | UNKWN | | - | - | _ | _ | UNKWN | UNKWN | UNKWN | _ | CAN COMMCIRCUIT (UN00) | _ |
| DIFF LOCK | _ | NG | UNKWN | | - | | _ | _ | _ | UNKWN | UNKWN | _ | CAN COMMCIRCUIT (UN00) | - |
| всм | No indication | NG | UNKWN | UNKIN | Ι | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No indication | - | UNKWN | | UNKWN | _ | — | UNKWN | — | - | UNKWN | UNKWN | CAN COMMCIRCUIT (UN00) | - |
| ALL MODE AWD/4WD | Ι | NG | UNKWN | | UNKWN | - | — | — | UNKWN | - | UNKWN | Ι | CAN COMMCIRCUIT (UN00) | _ |
| ABS | - | NG | UNKWN | | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | - | Ι | CAN COMMCIRCUIT (UN00) | _ |
| IPDM E/R | No indication | - | UNKWN | | _ | - | _ | UNKWN | _ | _ | _ | - | CAN COMMCIRCUIT (UN00) | - |



Case 4

Check TCM circuit. Refer to LAN-123, "TCM Circuit Inspection" .

| | | | | | C | | SUPPC | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| SELECT SYSTEM | screen | | | | | | Rec | eive diag | nosis | | | | SELE-DIAG | BESUITS |
| | 0010011 | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | TEODERO |
| ENGINE | - | - | UNKWN | - | UNKWN | - | — | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMMCIRCUIT (U N00) | CAN COMM CIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKIN | — | — | — | — | UNK | UNKWN | UNKVN | _ | CAN COMMCIRCUIT (UN00) | _ |
| DIFF LOCK | - | NG | UNKWN | UNKWN | - | — | — | - | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| всм | No indication | NG | UNKWN | UNKWN | — | — | — | — | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| METER | No indication | — | UNKWN | UNKWN | UNKWN | — | — | UNKWN | - | - | UNKWN | UNKWN | CAN COMMCIRCUIT (UN00) | - |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKIN | — | — | - | UNKWN | - | UNKWN | Ι | CAN COMMCIRCUIT (UN00) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKIN | UNKWN | UNKWN | — | - | UNKWN | — | - | CAN COMMCIRCUIT (UN00) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT (U1000) | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | PKIC5861E |



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Case 5

Check differential lock control unit circuit. Refer to LAN-123, "Differential Lock Control Unit Circuit Inspection".

| | | | | | C | CAN DIAG | SUPPC | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|------------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1 | T | | | | Rec | eive diagı | nosis | | | | SELE-DIAG | BESULTS |
| | | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | — | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | — | NG | UNKWN | UNKWN | - | - | — | — | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| DIFF LOCK | — | NG | | UNKIN | | - | - | — | — | UNKWN | | Ι | CAN COMM CIRCUIT (U 1000) | - |
| всм | No indication | NG | UNKWN | UNKWN | _ | - | - | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | — | UNKWN | — | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | UNKWN | _ | — | — | UNKWN | - | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | | UNKWN | - | - | UNKWN | - | Ι | CAN COMMCIRCUIT (U N00) | - |
| IPDM E/R | No indication | — | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | _ | _ | - | CAN COMM CIRCUIT (U1000) | _ |



Case 6

Check steering angle sensor circuit. Refer to LAN-124, "Steering Angle Sensor Circuit Inspection" .

| | | | | | C | CAN DIAG | SUPPC | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | | | | | | Rec | eive diagı | nosis | | | | SELE-DIAG | BESHITS |
| | 0010011 | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | - | NG | UNKWN | UNKWN | - | - | - | — | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | - |
| DIFF LOCK | - | NG | UNKWN | UNKWN | - | _ | _ | _ | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| всм | No indication | NG | UNKWN | UNKWN | _ | _ | _ | _ | UNKWN | - | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | _ | UNKWN | - | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | - | NG | UNKWN | UNKWN | UNKWN | - | - | - | UNKWN | - | UNKWN | _ | CAN COMM CIRCUIT (U1000) | _ |
| ABS | _ | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKIN | _ | - | UNKWN | _ | _ | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | — | UNKWN | UNKWN | _ | — | — | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT (U1000) | _ |



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Case 7

Check data link connector circuit. Refer to LAN-124, "Data Link Connector Circuit Inspection" .

| | | | | | C | CAN DIAC | SUPPO | RT MNT | R | | | | | |
|------------------|------------------|-----------|----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | Latital | Transmit | | | - | Rece | eive diagi | nosis | | | - | SELE-DIAG | BESULTS |
| | | diagnosis | MG UNKWN | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKWN | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | 1 | NG | UNKWN | UNKWN | - | — | — | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| DIFF LOCK | Ι | NG | UNKWN | UNKWN | | - | - | | — | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | — |
| всм | No inditation | NG | UNKWN | UNKWN | - | - | - | _ | UNKWN | - | Ι | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No inditation | - | UNKWN | UNKWN | UNKWN | — | _ | UNKWN | _ | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | - |
| ALL MODE AWD/4WD | Ι | NG | UNKWN | UNKWN | UNKWN | — | _ | - | UNKWN | - | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | — |
| IPDM E/R | No inditation | - | UNKWN | UNKWN | _ | _ | - | UNKWN | _ | _ | - | _ | CAN COMM CIRCUIT (U1000) | _ |



Case 8

Check BCM circuit. Refer to LAN-125, "BCM Circuit Inspection" .

| | | | | | C | AN DIAG | SUPPO | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|--------------------------|
| SELECT SYSTEM | screen | 1 | T | | | | Rece | eive diag | nosis | | | | SELE-DIAG | BESUITS |
| | 0010011 | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | — | UNKWN | _ | UNKWN | _ | — | UNKIN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUI (UN01) |
| A/T | — | NG | UNKWN | UNKWN | | 1 | _ | | UNKWN | UNKWN | UNKWN | | CAN COMM CIRCUIT (U1000) | _ |
| DIFF LOCK | - | NG | UNKWN | UNKWN | - | - | — | - | - | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | _ |
| всм | No indivation | NG | UNKWN | UNKWN | - | - | - | - | UNKWN | - | Ι | UNKWN | CAN COMM CIRCUIT (U1000) | — |
| METER | No indication | — | UNKWN | UNKWN | UNKWN | - | — | UNKIN | — | - | UNKWN | UNKWN | CAN COMMCIRCUIT (UN00) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKWN | _ | — | — | UNKWN | - | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKWN | - | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | _ | | _ | - | _ | _ | CAN COMMCIRCUIT (U1000) | _ |



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Case 9

Check combination meter circuit. Refer to LAN-125, "Combination Meter Circuit Inspection" .

| | | | | | C | AN DIAG | SUPPO | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| SELECT SYSTEM | screen | 1 | T | | | | Rece | eive diagi | nosis | | | | SELE-DIAG | BESULTS |
| | 5010011 | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | - | UNKWN | - | _ | UNKWN | UNKIN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUI (U 1001) |
| A/T | | NG | UNKWN | UNKWN | — | - | — | - | UNKIN | UNKWN | UNKWN | - | CAN COMMCIRCUIT (U 1000) | _ |
| DIFF LOCK | | NG | UNKWN | UNKWN | | Ι | - | | - | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | — |
| всм | No indication | NG | UNKWN | UNKWN | - | - | - | _ | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No inditation | _ | UNKWN | UNKWN | UNKWN | | _ | UNKWN | — | — | UNKWN | UNKWN | CAN COMMCIRCUIT (U 100) | _ |
| ALL MODE AWD/4WD | | NG | UNKWN | UNKWN | UNKWN | _ | _ | — | UNK | _ | UNKWN | — | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | 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 transfer control unit circuit. Refer to LAN-126, "Transfer Control Unit Circuit Inspection" .

| | | | | | C | CAN DIAC | G SUPPO | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|---------|-------------|---------------|---------|-----------------|-------------|-----------------------------|---------------------------|
| SELECT SYSTEM | screen | 1 | | | | | Rece | eive diag | nosis | | | | SELE-DIAG | |
| | | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKIN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMMCIRCUI (U 101) |
| A/T | - | NG | UNKWN | UNKWN | — | — | - | — | UNKWN | UNKUN | UNKWN | - | CAN COMMCIRCUIT (U 1000) | - |
| DIFF LOCK | | NG | UNKWN | UNKWN | - | — | - | - | - | UNKUN | UNKWN | - | CAN COMMCIRCUIT (U 100) | _ |
| всм | No indication | NG | UNKWN | UNKWN | - | — | - | - | UNKWN | - | Ι | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | _ | UNKWN | UNKWN | UNKWN | — | — | UNKWN | — | - | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | - | NG | UNKIN | UNKVN | UNKIN | — | - | - | UNK | — | UNKVN | — | CAN COMMCIRCUIT (UN00) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | - | - | UNKUN | - | - | CAN COMMCIRCUIT (UN00) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | _ | _ | UNKWN | _ | — | _ | - | CAN COMM CIRCUIT (U1000) | _ |



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Case 11

А Check ABS actuator and electric unit (control unit) circuit. Refer to LAN-126, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

| | | | | | C | AN DIAG | SUPPC | RT MNT | R | | | | | |
|--------------------|------------------|----------------------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-------------------------------|---------------------------|
| SELECT SYSTEM | screen | | | | | | Rec | eive diag | nosis | | | | SELE-DIAG | RESULTS |
| OLLOT OT OT OT ENT | Sorcen | Initial diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | _ | UNKWN | - | _ | UNKWN | UNKWN | UNKWN | UNKIN | UNKWN | CAN COMM CIRCUIT C (U1000) | CAN COMMCIRCUIT (UN01) |
| A/T | - | NG | UNKWN | UNKWN | - | - | - | - | UNKWN | UNKWN | UNKVN | - | CAN COMMCIRCUIT (UN00) | _ |
| DIFF LOCK | _ | NG | UNKWN | UNKWN | _ | | _ | _ | _ | UNKWN | UNKIN | — | CAN COMMCIRCUIT (UN00) | _ |
| ВСМ | No indication | NG | UNKWN | UNKWN | - | _ | _ | - | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | _ | - | UNKWN | - | - | UNKIN | UNKWN | CAN COMMCIRCUIT (UN00) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKWN | _ | - | - | UNKWN | - | UNKIN | - | CAN COMMCIRCUIT (UN00) | - |
| ABS | - | V | UNK | UNKWN | UNKVN | UNKVN | UNK | _ | - | UNK | - | _ | CAN COMMCIRCUIT (UN00) | - |
| IPDM E/R | No indication | - | UNKWN | UNKWN | _ | - | _ | UNKWN | _ | _ | - | _ | CAN COMM CIRCUIT (U1000) | - |



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Case 12

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Check IPDM E/R circuit. Refer to LAN-127, "IPDM E/R Circuit Inspection" .

| | | | | | C | AN DIAG | SUPPO | RT MNT | R | | | | | |
|------------------|------------------|-----------|-----------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|------------------------------|
| SELECT SYSTEM | screen | La Wal | T | | | | Rece | eive diag | nosis | | | | SELE-DIAG | BESUITS |
| | | diagnosis | diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIVIC | |
| ENGINE | _ | _ | UNKWN | - | UNKWN | _ | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U 1001) |
| 4 /T | — | NG | UNKWN | UNKWN | - | 1 | _ | — | UNKWN | UNKWN | UNKWN | | CAN COMM CIRCUIT (U1000) | _ |
| DIFF LOCK | _ | NG | UNKWN | UNKWN | - | — | — | — | — | UNKWN | UNKWN | — | CAN COMM CIRCUIT (U1000) | _ |
| ВСМ | No indication | NG | UNKWN | UNKWN | _ | _ | — | — | UNKWN | — | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | - | — | UNKWN | — | — | UNKWN | UNKWN | CAN COMMCIRCUIT (UN00) | — |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | UNKWN | 1 | _ | - | UNKWN | — | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | — | - | UNKWN | - | — | CAN COMM CIRCUIT (U1000) | _ |
| PDM E/R | Notindiation | _ | UNKWN | UNKWN | - | _ | _ | UNKWN | _ | _ | _ | _ | CAN COMMCIRCUIT | _ |



Case 13

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| | | | | | | | | | | | | | - | |
|------------------|------------------|----------------------|-----------------------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-----------------------------|----------------------------|
| | | | | | C | AN DIAG | SUPPC | RT MNT | R | | | | | |
| SELECT SYSTEM | screen | | - | | | | Rec | eive diagı | nosis | | | | | BESUITS |
| | Soreen | Initial diagnosis | Iransmit diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | - | UNKVN | - | UNK | _ | _ | UNKVN | UNKWN | UNKIN | | UNK | CAN COMMCIRCUIT (U 1000) | CAN COMM CIRCUIT (UN01) |
| A/T | _ | NG | UNKWN | UNKVN | _ | 1 | | — | UNKWN | | UNKVN | 1 | CAN COMMCIRCUIT (U 1000) | _ |
| DIFF LOCK | _ | NG | | UNKIN | _ | — | — | — | — | UNK | UNKIN | - | CAN COMMCIRCUIT (UN00) | _ |
| всм | No indivision | NG | UNKWN | UNKWN | — | — | — | — | UNKWN | - | - | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indivision | — | UNKWN | UNKWN | UNKWN | _ | _ | UNKWN | _ | - | UNKWN | UNKWN | CAN COMMCIRCUIT (U N00) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKIN | UNKIN | - | - | - | UNKIN | — | UNKUN | - | CAN COMMCIRCUIT (U 100) | _ |
| ABS | _ | V | | UNKIN | | | | — | — | UNKIN | _ | - | CAN COMMCIRCUIT (U 100) | _ |
| IPDM E/R | No indivision | - | UNKWN | UNKWN | _ | - | _ | UNKWN | _ | _ | - | - | CAN COMMCIRCUIT (UN00) | — |
| | | | | | | | | | | | | | | DKICERTOF |

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Case 14

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>A</u> <u>Circuit Inspection</u>".

| | | | | | C | AN DIAC | SUPPO | RT MNT | R | | | | | |
|----------------------|------------------|----------------------|-----------------------|-------|-------|--------------|-------|-------------|---------------|---------|-----------------|-------------|-------------------------------------|---------------------------|
| SELECT SYSTEM | screen | | | | | | Rece | eive diagi | nosis | | | | SELE-DIAG | BESUITS |
| OLLEGT OT OT OT LINT | 5010011 | Initial diagnosis | Iransmit diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | OLLI DIAC | |
| ENGINE | - | — | UNKWN | - | UNK | _ | _ | UNKWN | UNKWN | UNKWN | UNKVN | UNKWN | CAN COMMCIRCUIT (U 1 000) | CAN COMMCIRCUIT (UN01) |
| A/T | _ | NG | UNKWN | UNKWN | - | - | — | - | UNKWN | UNKWN | UNKWN | - | CAN COMM CIRCUIT (U1000) | - |
| DIFF LOCK | Ι | NG | UNKWN | UNKWN | | | - | | — | UNKWN | UNKIN | - | CAN COMM CIRCUIT (UN00) | _ |
| BCM | No indication | NG | UNKWN | UNKWN | _ | _ | _ | _ | UNKWN | - | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKIN | _ | - | UNKWN | _ | - | UNKIN | UNKWN | CAN COMMCIRCUIT (UN00) | _ |
| ALL MODE AWD/4WD | _ | NG | UNKWN | UNKWN | UNKIN | _ | - | - | UNKWN | - | UNKIN | - | CAN COMMCIRCUIT (UN00) | _ |
| ABS | - | NG | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | _ | _ | UNKWN | — | - | CAN COMM CIRCUIT (U1000) | _ |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | _ | - | _ | UNKWN | _ | _ | _ | _ | CAN COMM CIRCUIT (U1000) | _ |

Case 15

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-128</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

| | | | | CAN DIAG SUPPORT MNTR | | | | | | | | | | |
|------------------|------------------|----------------------|-----------------------|-----------------------|-------|--------------|------|-------------|---------------|---------|-----------------|-------------|-----------------------------|-----------------------------|
| | | | | | | | Rec | eive diagı | nosis | | | | | |
| | Succin | Initial diagnosis | lransmit diagnosis | ECM | тсм | DIFF LOCK | STRG | BCM /SEC | METER /M&A | AWD/4WD | VDC/TCS /ABS | IPDM E/R | | |
| ENGINE | - | _ | UNKWN | 1 | UNKWN | | _ | UNKWN | UNKWN | UNKWN | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | CAN COMM CIRCUIT (U1001) |
| A/T | — | NG | UNKWN | I | I | 1 | _ | — | _ | — | UNKWN | - | CAN COMMCIRCUIT (U 100) | _ |
| DIFF LOCK | - | NG | UNKWN | UNKWN | | Ι | - | - | — | UNKWN | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| всм | No indication | NG | UNKWN | UNKWN | | | _ | - | UNKWN | _ | _ | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| METER | No indication | - | UNKWN | UNKWN | UNKWN | | — | UNKWN | _ | — | UNKWN | UNKWN | CAN COMM CIRCUIT (U1000) | _ |
| ALL MODE AWD/4WD | — | NG | UNKWN | UNKWN | UNKWN | - | — | - | UNKWN | — | UNKWN | Ι | CAN COMM CIRCUIT (U1000) | _ |
| ABS | - | NG | UNKWN | - | UNKWN | - | - | - | - | - | - | - | CAN COMMCIRCUIT (U 100) | - |
| IPDM E/R | No indication | _ | UNKWN | UNKWN | | 1 | _ | UNKWN | _ | _ | — | - | CAN COMM CIRCUIT (U1000) | - |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | PKIC5872E |

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TROUBLE DIAGNOSIS FOR SYSTEM

Inspection Between TCM and Data Link Connector Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector F14
- Harness connector E5
- Harness connector E152
- Harness connector M31

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect A/T assembly connector and harness connector F14.
- 2. Check continuity between A/T assembly harness connector and harness connector.

| A/T assemb | bly connector | Harness | Continuity | |
|------------|---------------|-----------|------------|------------|
| Connector | Terminal | Connector | Terminal | Continuity |
| FQ | 3 | F1/ | 2 | Yes |
| гЭ | 8 | 1 14 | 3 | Yes |

OK or NG

OK >> GO TO 3.

NG >> Repair harness.

3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect harness connector E152.
- 2. Check continuity between harness connector and SMJ harness connector.

| Harness connector | | SMJ harnes | Continuity | |
|-------------------|----------|------------|------------|------------|
| Connector | Terminal | Connector | Terminal | Continuity |
| E5 | 2 | E152 | 52G | Yes |
| | 3 | LIJZ | 51G | Yes |

OK or NG

OK >> GO TO 4.

NG >> Repair harness.





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4. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between SMJ harness connector and data link connector.

| SMJ harness connector | | Data link | Continuity | |
|-----------------------|----------|-----------|------------|------------|
| Connector | Terminal | Connector | Terminal | Continuity |
| M21 | 52G | M22 | 6 | Yes |
| IVISI | 51G | 10122 | 14 | Yes |

OK or NG

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

NG >> Repair harness.

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

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M91
- Harness connector E26

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect harness connector M91.
- 2. Check continuity between data link connector and harness connector.

| Data link connector | | Harness | Continuity | |
|---------------------|----------|--------------------|------------|------------|
| Connector | Terminal | Connector Terminal | | Continuity |
| Moo | 6 | MQ1 | 11 | Yes |
| IVIZZ | 14 | | 10 | Yes |

OK or NG

OK >> GO TO 3.

NG >> Repair harness.





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3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- Check continuity between harness connector and ABS actuator and electric unit (control unit) harness connector.

| Harness connector | | ABS actuator a (control uni | Continuity | |
|-------------------|----------|-----------------------------|------------|-----|
| Connector | Terminal | Connector | Terminal | |
| E26 | 11 | E125 | 11 | Yes |
| L20 | 10 | L125 | 15 | Yes |

OK or NG

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

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- M/T model
- ECM connector
- Harness connector E152
- Harness connector M31
- A/T model
- ECM connector
- Harness connector E2
- Harness connector F32

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

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

| ECM connector | Terr | Resistance (Approx.) | |
|---------------|------|-------------------------|-------------|
| E16 | 94 | 86 | 108 – 132 Ω |

OK or NG

OK >> Replace ECM.

NG >> • M/T model

- Repair harness between ECM and data link connector.
- A/T model
- Repair harness between ECM and A/T assembly.



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1.

1.

2.

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

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

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

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

| Steering angle sensor connector | Terr | Resistance (Approx.) | |
|---------------------------------|------|-------------------------|-----------|
| M47 | 4 | 5 | 54 – 66 Ω |

OK or NG

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



Steering angle sensor connector

Data Link Connector Circuit Inspection

1. CHECK CONNECTOR



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

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector terminals.

| Da cor | ata link nnector | Terr | Resistance (Approx.) | | | | |
|-----------|--|-------------------|-------------------------|----------------|--|--|--|
| | M22 | 6 | 14 | 54 – 66 Ω | | | |
| OK or N | OK or NG | | | | | | |
| OK | OK >> Diagnose again. Refer to <u>LAN-5</u> , "TROUBLE DIAG NOSES WORK FLOW" . | | | | | | |
| NG | >> Repa | air harness betwe | en data link conn | ector and BCM. | | | |





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Revision: September 2005

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

BCM Circuit Inspection

1. CHECK CONNECTOR

3. Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. **Disconnect BCM connector.**
- 2. Check resistance between BCM harness connector terminals.

| BCM connector | Terr | Resistance (Approx.) | |
|---------------|------|-------------------------|-----------|
| M18 | 39 | 40 | 54 – 66 Ω |

OK or NG

- OK >> Replace BCM. Refer to BCS-26, "Removal and Installation of BCM".
- NG >> Repair harness between BCM and data link connector.

Combination Meter Circuit Inspection

1. CHECK CONNECTOR

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

LAN-125

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

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

| Combination meter connector | Terr | Resistance (Approx.) | |
|--------------------------------|------|-------------------------|-----------|
| M24 | 12 | 11 | 54 – 66 Ω |
| | | | |

OK or NG

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





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Transfer Control Unit Circuit Inspection

1. CHECK CONNECTOR

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

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

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

| Transfer control unit connector | Terr | Resistance (Approx.) | |
|------------------------------------|------|-------------------------|------------------|
| M152 | 1 | 2 | $54-66 \ \Omega$ |

OK or NG

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

ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

1. CHECK CONNECTOR

PKIC1656E UKS0052E

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

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector terminals.

| ABS actuator and electric unit (con- trol unit) connector | Terr | ninal | Resistance (Approx.) |
|---|------|-------|-------------------------|
| E125 | 11 | 15 | 54 – 66 Ω |

OK or NG

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



[CAN]



3. CHECK HARNESS FOR SHORT CIRCUIT

| Check continuity | between data link | c connector termin | nals and ground. |
|--------------------------------------|-------------------|--------------------|------------------|
| Data link connectorTerminalM22614 | | Continuity | |
| | 6 | Ground | No |
| | 14 | | 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.) | |
|----|--|-------|----------------------|--|
| | 94 | 86 | 108 – 132 Ω | |
| 3. | . Check resistance between IPDM E/R terminals. | | | |
| | Terr | ninal | Resistance (Approx.) | |

| Ierr | ninal | Resistance (Approx.) |
|------|-------|----------------------|
| 39 | 40 | 108 – 132 Ω |
| | | |

OK or NG

OK >> GO TO 5.

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

СНЕСК 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-13, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced".

6. UNIT REPRODUCIBILITY INSPECTION

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

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

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

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UKS0052H



[CAN]



| PDM E/R power supply circuit. Refer to PG-31, "IPDM E/R Power/Ground Circuit Inspection". anition power supply circuit. Refer to PG-14, "IGNITION POWER SUPPLY — IGNITION SW. IN ON ND/OR START". | [CAI | N] |
|---|---|-----------|
| gnition power supply circuit. Refer to <u>PG-14, "IGNITION POWER SUPPLY — IGNITION SW. IN ON</u> | PDM E/R power supply circuit. Refer to PG-31, "IPDM E/R Power/Ground Circuit Inspection". | |
| | gnition power supply circuit. Refer to <u>PG-14, "IGNITION POWER SUPPLY — IGNITION SW. IN (</u> AND/OR START". | <u>NC</u> |
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