

## 12. Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### A: DTC B1100 INTEG. UNIT SYSTEM ERROR

#### DTC DETECTING CONDITION:

Memory read out error in body integrated unit

#### TROUBLE SYMPTOM:

LAN communication immobilizer function may not be executed normally.

| Step  | Check                           | Yes  | No                                      |
|---|---------------------------------|--|---|
| 1<br><b>CHECK DTC.</b><br>Check DTC indicated by body integrated unit.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>   | Is B1100 a current malfunction? | Go to step 2.  | Temporary EEPROM access error occurred. |
| 2<br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1100 a current malfunction? | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Temporary EEPROM access error occurred. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### B: DTC B1101 BATT P/SUPPLY MALFUNCTION CONT

#### DTC DETECTING CONDITION:

- Open or short in battery power supply control circuit
- Voltage malfunction caused by poor contact

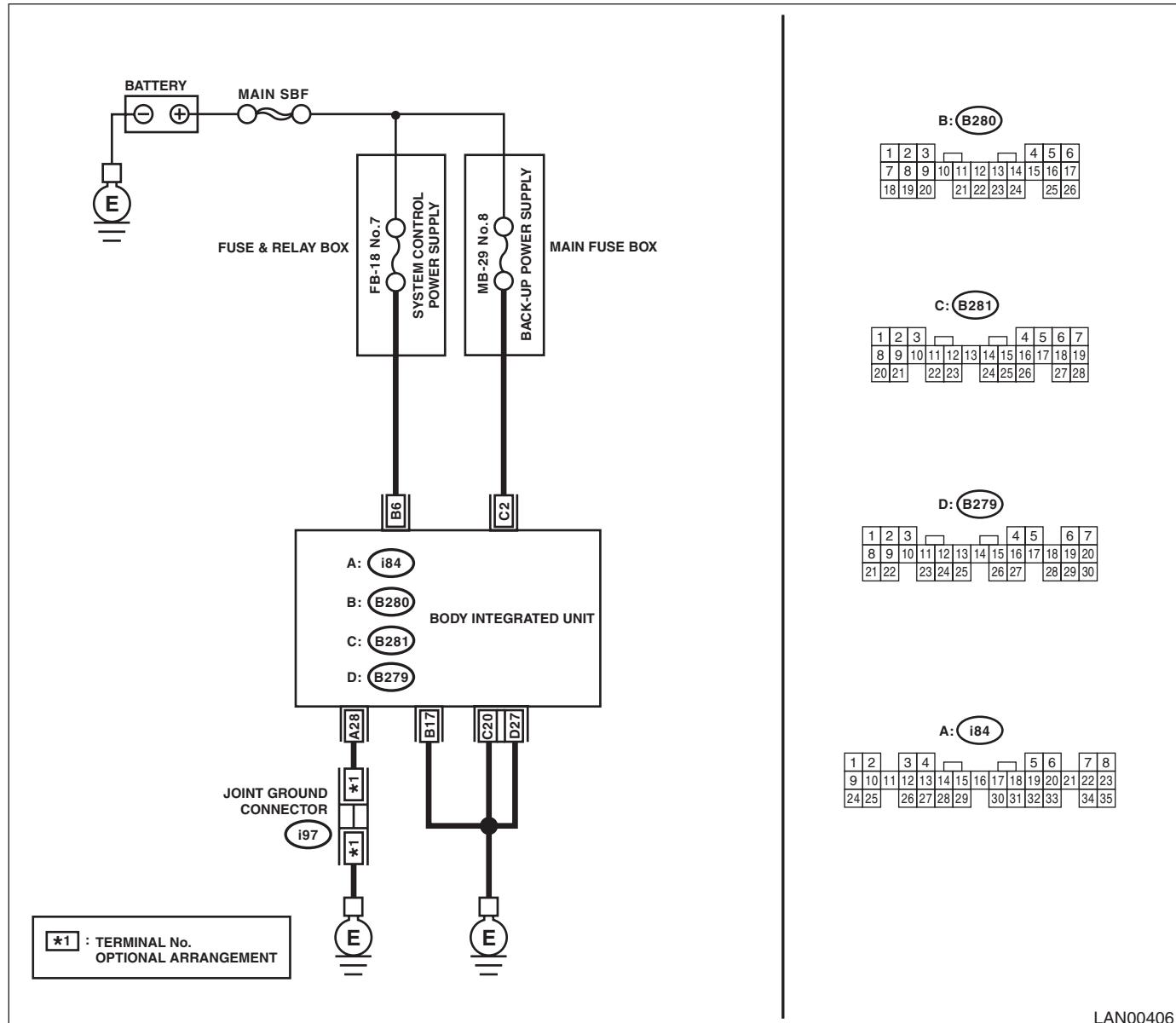
#### TROUBLE SYMPTOM:

Each function stops operation.

#### NOTE:

- When B1102 BATT p/supply (backup) malfunction is output at the same time, all the function of body integrated unit may not operate.
- B1101 may input when the battery run-out occurs.

#### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is B1101 a current malfunction? | Go to step 2. | Go to step 5. |

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LAN SYSTEM (DIAGNOSTICS)

| Step   | Check                               | Yes  | No   |
|--|-------------------------------------|--|--|
| <b>2 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector from body integrated unit and reconnect.<br>3) Wait approx. 2 minutes.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1101 a current malfunction?     | Go to step 3.  | Go to step 5.  |
| <b>3 CHECK FUSE.</b><br>1) Turn the ignition switch to OFF.<br>2) Inspect the fuse.  | Is the fuse OK?                     | Go to step 4.  | Replace the defective fuse.  |
| <b>4 CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector (B280).<br>2) Measure the voltage between body integrated unit connector and chassis ground using tester.<br><br><i>Connector &amp; terminal<br/>(B280) No. 6 (+) — Chassis ground (-):</i>        | Is the voltage 8.5 — 16.5 V?        | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Repair or replace the open or shorted circuit between body integrated unit and fuse. |
| <b>5 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B280).   | Is there poor contact of connector? | Repair or replace the poor contact of connector.                                     | A temporary change of voltage occurred.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

## C: DTC B1102 BATT P/SUPPLY MALFUNCTION BACKUP

### DTC DETECTING CONDITION:

Voltage malfunction caused by poor contact of battery power supply backup circuits

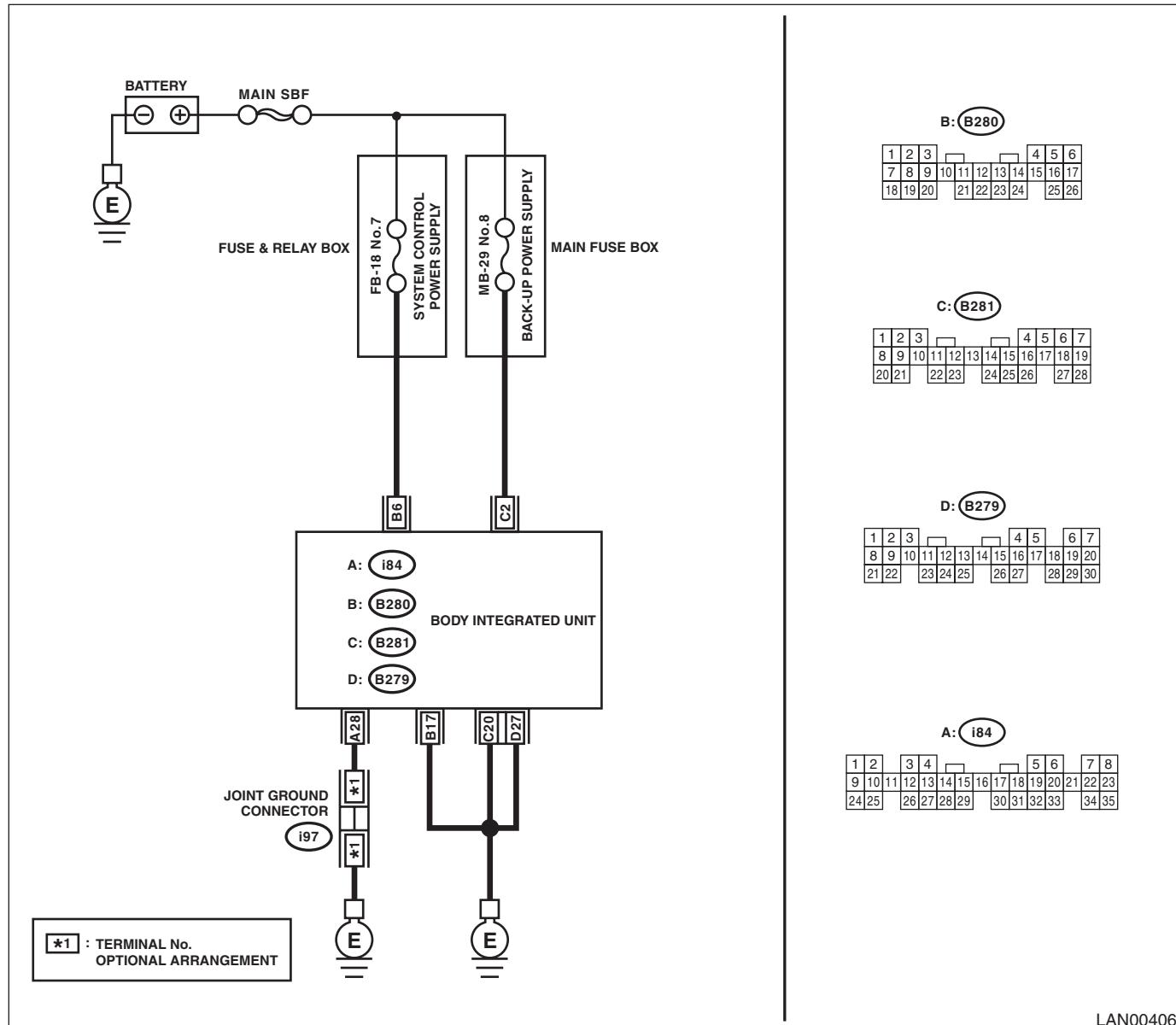
### TROUBLE SYMPTOM:

No influence.

### NOTE:

- When B1101 BATT p/supply (cont.) malfunction are output at the same time, all function of body integrated unit may not operate.
- B1101 may input when the battery run-out occurs.

### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is B1102 a current malfunction? | Go to step 2. | Go to step 5. |

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LAN SYSTEM (DIAGNOSTICS)

| Step  | Check                               | Yes  | No   |
|---|-------------------------------------|--|--|
| <b>2</b> <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector from body integrated unit and reconnect.<br>3) Wait approx. 2 minutes.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1102 a current malfunction?     | Go to step 3.  | Go to step 5.  |
| <b>3</b> <b>CHECK FUSE.</b><br>1) Turn the ignition switch to OFF.<br>2) Inspect the fuse.  | Is the fuse OK?                     | Go to step 4.  | Replace the defective fuse.  |
| <b>4</b> <b>CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector (B281).<br>2) Measure the voltage between body integrated unit connector and chassis ground using tester.<br><br><i>Connector &amp; terminal<br/>(B281) No. 2 (+) — Chassis ground (-):</i>        | Is the voltage 8.5 — 16.5 V?        | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Repair or replace the open or shorted circuit between body integrated unit and fuse. |
| <b>5</b> <b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B280).   | Is there poor contact of connector? | Repair or replace the poor contact of connector.                                     | A temporary change of voltage occurred.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### D: DTC B1103 IGNITION POWER FAILURE

#### DTC DETECTING CONDITION:

Voltage malfunction caused by poor contact of IGN power supply circuits

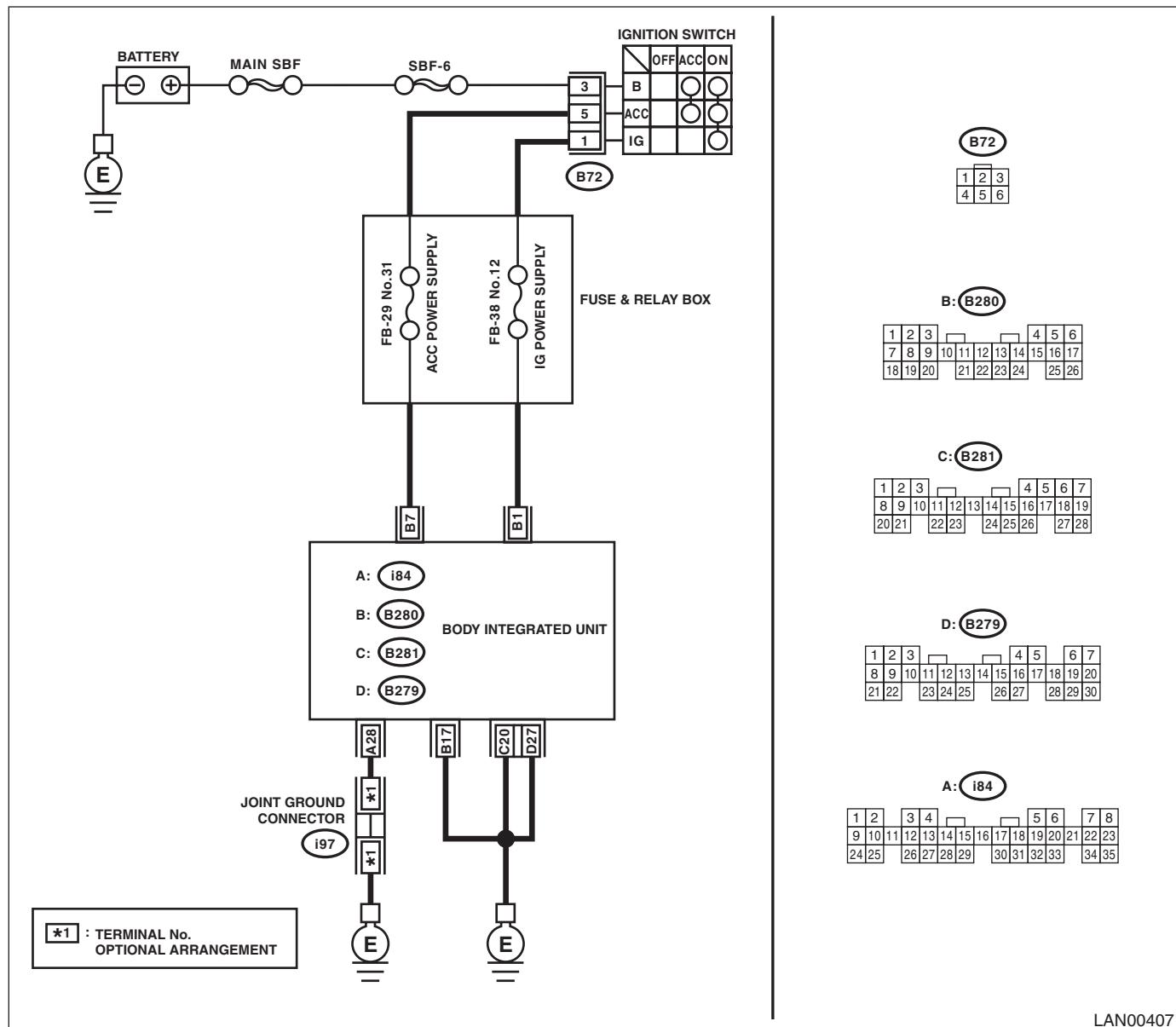
#### TROUBLE SYMPTOM:

Error related to LAN system will not be detected.

#### NOTE:

B1103 may output when the ignition switch turns to ON with the weak battery condition.

#### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is B1103 a current malfunction? | Go to step 2. | Go to step 5. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check                               | Yes   | No   |
|---|-------------------------------------|---|--|
| <b>2 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector from body integrated unit and reconnect.<br>3) Turn the ignition switch to ON.<br>4) Wait approx. 2 minutes.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.                                | Is B1103 a current malfunction?     | Go to step 3.   | Go to step 5.  |
| <b>3 CHECK FUSE.</b><br>1) Turn the ignition switch to OFF.<br>2) Inspect the fuse.   | Is the fuse OK?                     | Go to step 4.   | Replace the defective fuse.  |
| <b>4 CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector (B280).<br>2) Turn the ignition switch to ON.<br>3) Measure the voltage between body integrated unit connector and chassis ground using tester.<br><br><i>Connector &amp; terminal<br/>(B280) No. 1 (+) — Chassis ground (-):</i> | Is the voltage 8.5 — 16.5 V?        | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit. > | Repair or replace the open or shorted circuit between body integrated unit and fuse. |
| <b>5 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B280).  | Is there poor contact of connector? | Repair or replace the poor contact of connector.                                      | A temporary change of voltage occurred.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

## E: DTC B1104 ACC POWER FAILURE

### DTC DETECTING CONDITION:

Voltage malfunction caused by poor contact of ACC power supply circuits

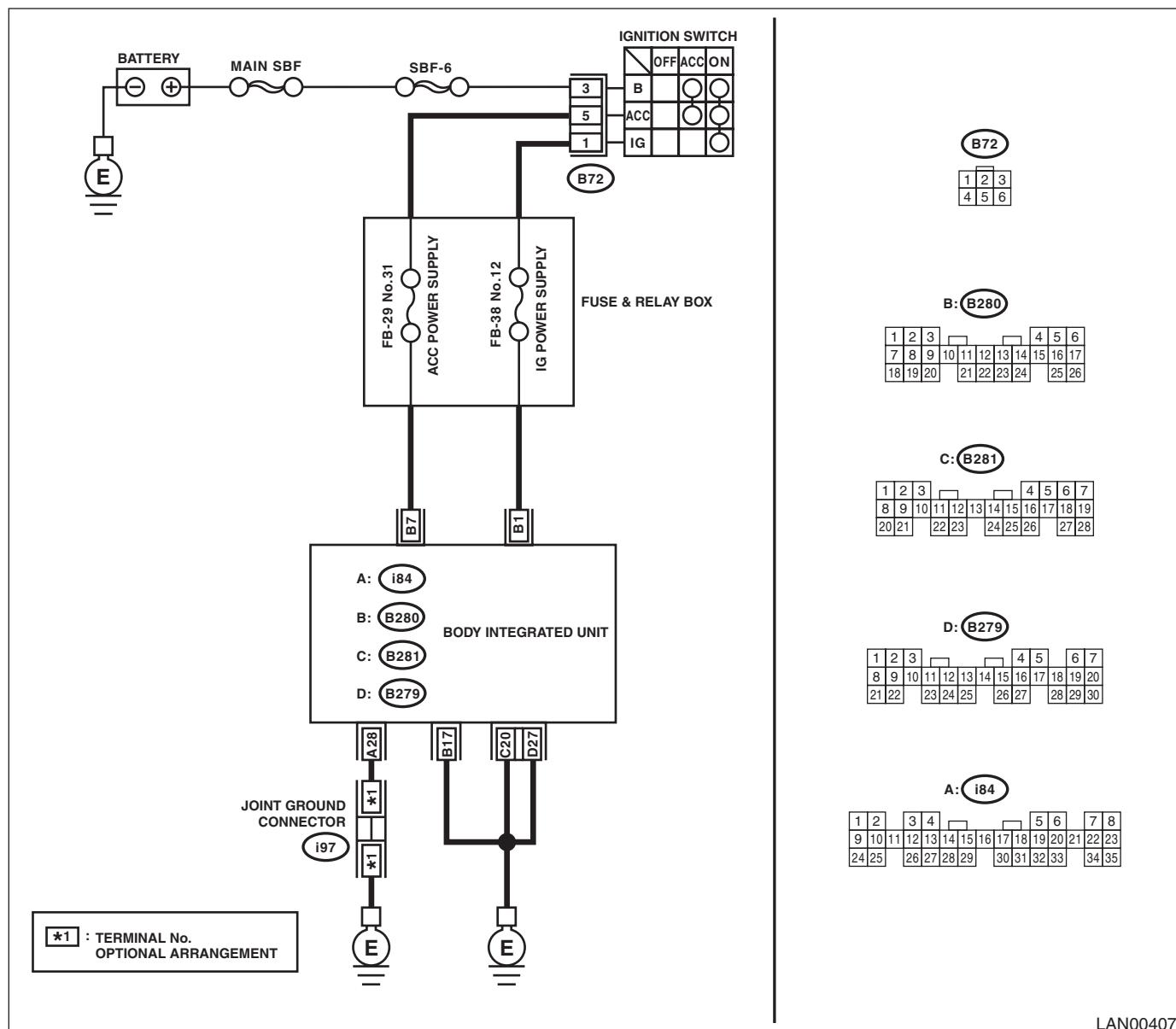
### TROUBLE SYMPTOM:

Does not exist.

### NOTE:

B1104 may output when the ignition switch turns to ACC with the weak battery condition.

### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is B1104 a current malfunction? | Go to step 2. | Go to step 5. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check                               | Yes  | No   |
|---|-------------------------------------|--|--|
| <b>2 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector from body integrated unit and reconnect.<br>3) Turn the ignition switch to ACC.<br>4) Wait approx. 2 minutes.<br>5) Turn the ignition switch to ON.<br>6) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1104 a current malfunction?     | Go to step 3.  | Go to step 5.  |
| <b>3 CHECK FUSE.</b><br>1) Turn the ignition switch to OFF.<br>2) Inspect the fuse.   | Is the fuse OK?                     | Go to step 4.  | Replace the defective fuse.  |
| <b>4 CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector (B280).<br>2) Turn the ignition switch to ACC.<br>3) Measure the voltage between body integrated unit connector and chassis ground using tester.<br><br><i>Connector &amp; terminal<br/>(B280) No. 7 (+) — Chassis ground (-):</i>        | Is the voltage 8.5 — 16.5 V?        | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Repair or replace the open or shorted circuit between body integrated unit and fuse. |
| <b>5 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B280).  | Is there poor contact of connector? | Repair or replace the poor contact of connector.                                     | A temporary change of voltage occurred.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

## F: DTC B1105 KEY INTERLOCK CIRCUIT ABNORMAL

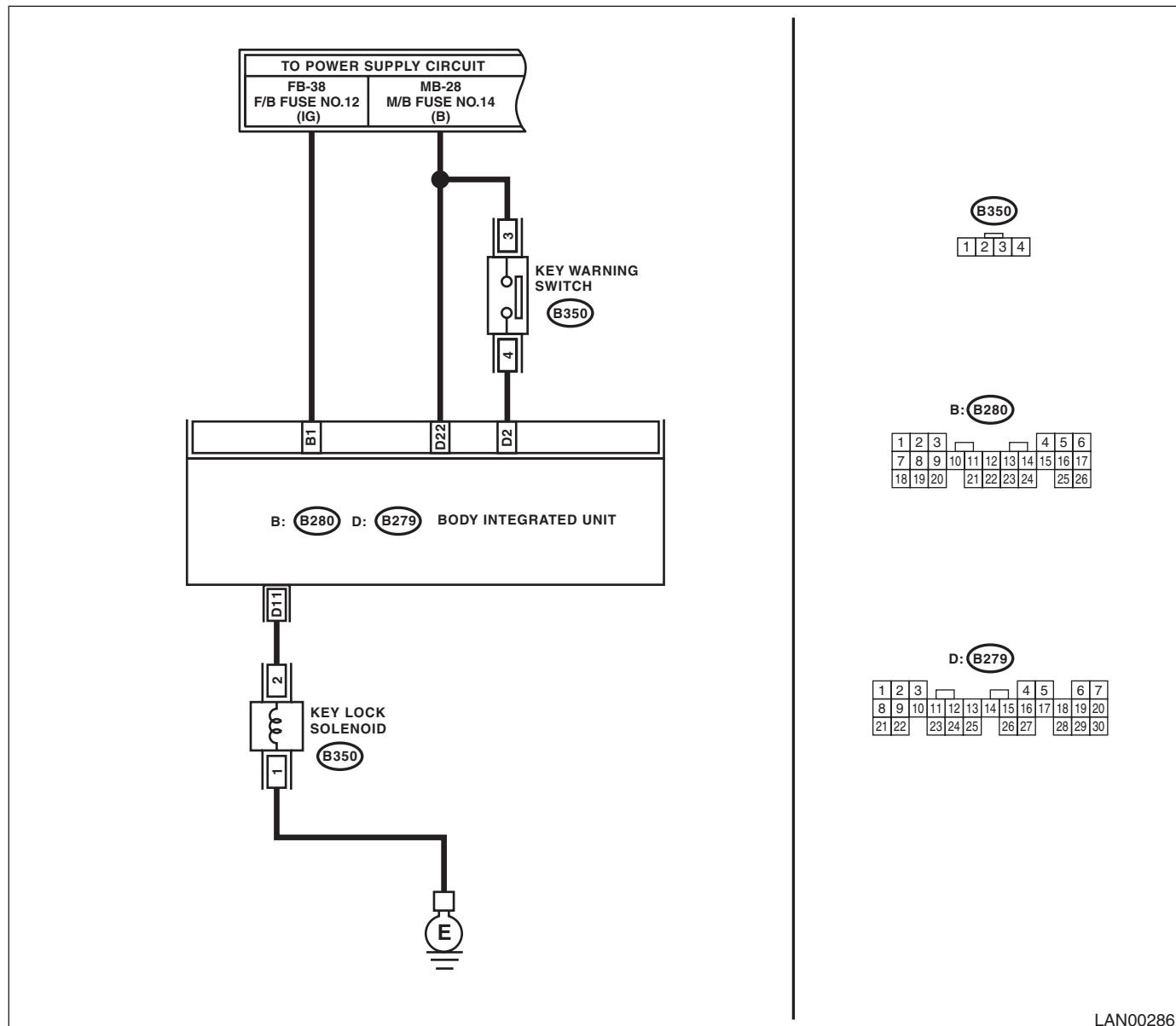
### DTC DETECTING CONDITION:

Ground short of key interlock circuit

### TROUBLE SYMPTOM:

Key interlock does not keep lock condition.

### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>1) Insert the ignition key.<br>2) Shift to the Neutral range.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1105 a current malfunction? | Go to step 2. | Go to step 8. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check   | Yes  | No  |
|---|---|--|---|
| <b>2 CHECK DTC.</b><br>1) Remove the ignition key.<br>2) Disconnect the key lock solenoid connector (B350) and body integrated unit connector (B279).<br>3) Connect the disconnected connectors.<br>4) Insert the key and shift into Neutral.<br>5) Turn the ignition switch to ON.<br>6) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1105 a current malfunction?                           | Go to step 3.  | Go to step 8.                                       |
| <b>3 CHECK KEY LOCK SOLENOID.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the key lock solenoid connector (B350).<br>3) Measure the resistance between the key lock solenoid connector.<br><i>Connector &amp; terminal (B350) No. 1 — No. 2:</i>  | Is the resistance 12 — 14.5 $\Omega$ ?                    | Go to step 4.  | Replace the key lock solenoid.                      |
| <b>4 CHECK KEY LOCK SOLENOID.</b><br>Connect the battery terminal to key lock solenoid.<br><i>Terminals</i><br><i>(B350) No. 2 — positive terminal:</i><br><i>(B350) No. 1 — ground terminal:</i>   | Is the solenoid activated and then key locked?            | Go to step 5.  | Replace the key lock solenoid.                      |
| <b>5 CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector (B279).<br>2) Measure the resistance between body integrated unit and key lock solenoid using tester.<br><i>Connector &amp; terminal (B350) No. 2 — (B279) No. 11:</i>  | Is the resistance less than 10 $\Omega$ ?                 | Go to step 6.  | Repair or replace the open circuit of harness.      |
| <b>6 CHECK HARNESS.</b><br>Measure the resistance between body integrated unit and chassis ground using tester.<br><i>Connector &amp; terminal (B279) No. 11 (+) — Chassis ground:</i>  | Is the resistance 1 M $\Omega$ or more?                   | Go to step 7.  | Repair or replace the short circuit of the harness. |
| <b>7 CHECK HARNESS.</b><br>1) Turn the ignition switch to ON.<br>2) Measure the voltage between body integrated unit and chassis ground using tester.<br><i>Connector &amp; terminal (B279) No. 11 (+) — Chassis ground (-):</i>  | Is the voltage 1.5 V or more?                             | Repair or replace the short circuit of the harness.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Replace the body integrated unit.                   |
| <b>8 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B279) and key lock solenoid connector (B350).   | Is there poor contact at disconnected connector terminal? | Repair the terminal where poor contact exists, or replace harness.                                     | It is possible that temporary poor contact occurs.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

## G: DTC B1106 SHIFT LOCK CIRCUIT FAILURE

### DTC DETECTING CONDITION:

Shift lock circuit is open or shorted.

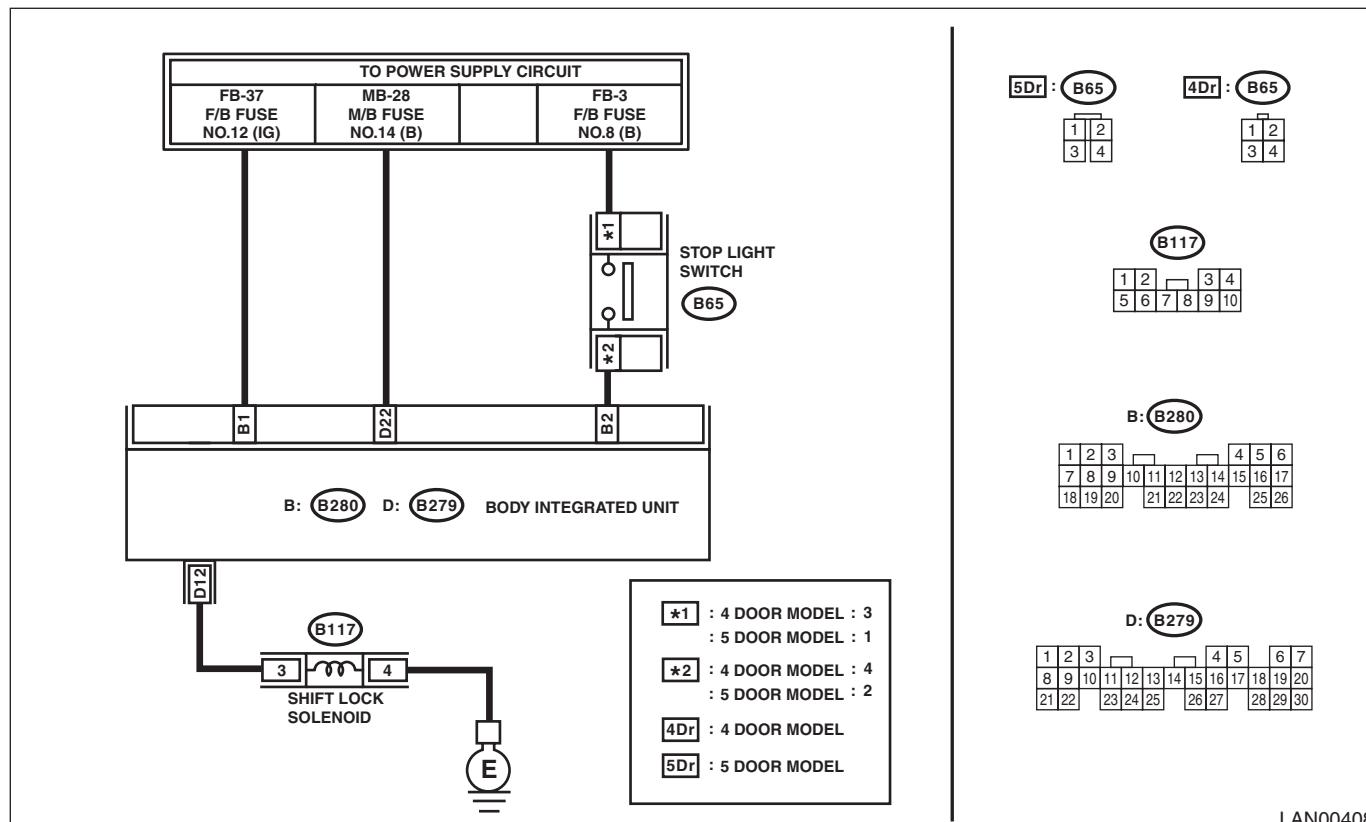
### TROUBLE SYMPTOM:

Shift lock does not be released or remain locked.

### NOTE:

P0801 may input simultaneously.

### WIRING DIAGRAM:



| Step  | Check                           | Yes           | No            |
|---|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>1) Turn the ignition switch to ON.<br>2) Keep the Parking range for approx. 5 seconds.<br>3) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is B1106 a current malfunction? | Go to step 2. | Go to step 8. |
| 2 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B279) and shift lock solenoid connector (B117).<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON, then keep the Parking range for approx. 5 seconds.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1106 a current malfunction? | Go to step 3. | Go to step 8. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step   | Check  | Yes  | No  |
|--|--|--|---|
| <b>3 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the shift lock solenoid connector (B117).<br>3) Measure the resistance between shift lock solenoid and chassis ground using tester.<br><br><i>Connector &amp; terminal<br/>(B117) No. 4 — Chassis ground:</i>  | Is the resistance less than 10 $\Omega$ ?                    | Go to step 4.  | Repair the open circuit of harness or replace harness.  |
| <b>4 CHECK SHIFT LOCK SOLENOID.</b><br>Measure the resistance between the shift lock solenoid connector.<br><br><i>Connector &amp; terminal<br/>(B117) No. 4 — No. 3:</i>  | Is the resistance 19 — 25 $\Omega$ ?                         | Go to step 5.  | Replace the shift lock solenoid.                        |
| <b>5 CHECK SHIFT LOCK SOLENOID.</b><br>Connect the battery terminal to shift lock solenoid.<br><br><i>Terminals<br/>(B117) No. 3 — positive terminal:<br/>(B117) No. 4 — ground terminal:</i>  | Is the solenoid activated, and then the shift lock released? | Go to step 6.  | Replace the shift lock solenoid.                        |
| <b>6 CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector (B279).<br>2) Measure the resistance between body integrated unit connector (B279) and chassis ground.<br><br><i>Connector &amp; terminal<br/>(B279) No. 12 — Chassis ground:</i>  | Is the resistance 1 $M\Omega$ or more?                       | Go to step 7.  | Repair the short circuit of harness or replace harness. |
| <b>7 CHECK HARNESS.</b><br>Measure the resistance between body integrated unit connector (B279) and shift lock solenoid (B117).<br><br><i>Connector &amp; terminal<br/>(B117) No. 3 — (B279) No. 12:</i>   | Is the resistance less than 10 $\Omega$ ?                    | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Repair the open circuit of harness or replace harness.  |
| <b>8 CHECK DTC.</b><br>1) Connect the disconnected connectors.<br>2) Turn the ignition switch to ON.<br>3) With Parking range, depress the brake pedal and keep it at depressed condition.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is B1106 a current malfunction?                              | Go to step 9.  | Go to step 10.  |
| <b>9 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B279) and shift lock solenoid connector (B117).<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Shift into Parking range, then depress the brake pedal.<br>6) Read the DTC of body integrated unit using Subaru Select Monitor. | Is B1106 a current malfunction?                              | Go to step 4.  | Go to step 10.  |
| <b>10 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the body integrated unit connector (B279) and shift lock solenoid connector (B117).   | Is there poor contact of connector terminal?                 | Repair the poor contact of the terminal or replace the harness.                      | It is possible that temporary poor contact occurs.      |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### H: DTC U1201 CAN-HS COUNTER ABNORMAL

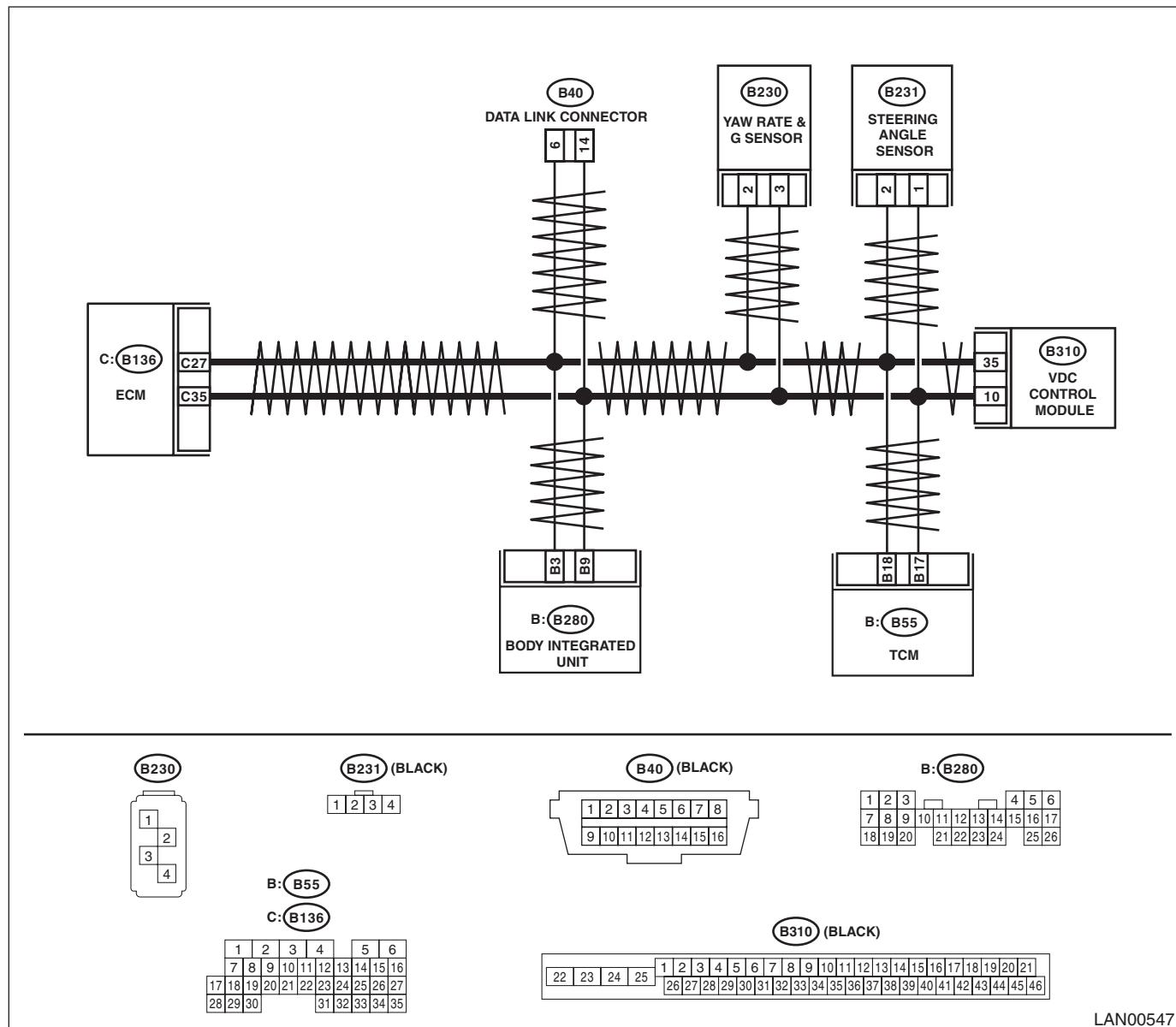
#### DTC DETECTING CONDITION:

Communication is unstable because of high speed CAN communication error.

#### TROUBLE SYMPTOM:

Malfunction indicator light illuminates.

#### WIRING DIAGRAM:



LAN00547

| Step   | Check   | Yes                                     | No             |
|--|---|---|----------------|
| 1 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there U1202, or any DTC other than for the body integrated unit? | Perform the diagnosis according to DTC. | Go to step 2.  |
| 2 <b>CHECK DTC.</b><br>Check DTC indicated by body integrated unit.  | Is U1201 a current malfunction?                                     | Go to step 3.                           | Go to step 14. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step   | Check                           | Yes  | No             |
|--|---------------------------------|--|----------------|
| <b>3 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Connect all the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1201 a current malfunction? | Go to step 4.  | Go to step 14. |
| <b>4 CHECK TCM.</b><br>NOTE:<br>If the vehicle is MT model, go to the next step.<br>1) Turn the ignition switch to OFF.<br>2) Disconnect the TCM connector (B55).<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1201 a current malfunction? | Go to step 5.  | Go to step 16. |
| <b>5 CHECK STEERING ANGLE SENSOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the TCM connector.<br>3) Disconnect the steering angle sensor connector (B231).<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1201 a current malfunction? | Go to step 6.  | Go to step 17. |
| <b>6 CHECK YAW RATE SENSOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the steering angle sensor connector.<br>3) Disconnect the yaw rate sensor connector (B230).<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1201 a current malfunction? | Go to step 7.  | Go to step 18. |
| <b>7 CHECK VDC/ABS CM.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the yaw rate sensor connector.<br>3) Disconnect the VDC/ABS CM (B301 or B310) connector.<br>4) Install the 120 $\Omega$ resistance to VDC/ABS CM connector terminals.<br><b>Terminals</b><br><b>(B310) No. 10 — No. 35:</b><br>5) Using the tester, measure the resistance between terminals of data link connector.<br><b>Terminals</b><br><b>(B40) No. 6 — No. 14:</b> | Is the resistance 60 $\Omega$ ? | Go to step 8.  | Go to step 10. |
| <b>8 CHECK DTC.</b><br>1) Turn the ignition switch to ON.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1201 a current malfunction? | Go to step 9.  | Go to step 10. |
| <b>9 CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1202 a current malfunction? | Replace the VDC/ABS CM. <Ref. to VDC-7, REMOVAL, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).> | Go to step 10. |

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## LAN SYSTEM (DIAGNOSTICS)

| Step  | Check  | Yes   | No   |
|---|--|---|--|
| 10 <b>CHECK ECM.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the VDC/ABS CM.<br>3) Disconnect the ECM connector (B136).<br>4) Install the 120 Ω resistance to ECM connector.<br><br><b>Terminals</b><br><b>(B136) No. 27 — No. 35:</b><br>5) Using the tester, measure the resistance between terminals of data link connector.<br><br><b>Connector &amp; terminal</b><br><b>(B40) No. 6 — No. 14:</b> | Is the resistance 60 Ω?                      | Go to step 11.  | Repair or replace the open circuit of harness.     |
| 11 <b>CHECK DTC.</b><br>1) Turn the ignition switch to ON.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1201 a current malfunction?              | Go to step 12.  | Go to step 13.                                     |
| 12 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1202 a current malfunction?              | Replace the ECM.<br><Ref. to FU(H4SO)-45, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(H4DOTC)-51, REMOVAL, Engine Control Module (ECM).> | Go to step 13.                                     |
| 13 <b>CHECK DTC.</b><br>1) Reconnect all the disconnected connectors.<br>2) Turn the ignition switch to ON.<br>3) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1201 a current malfunction?              | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.>  | Go to step 14.                                     |
| 14 <b>CHECK HARNESS.</b><br>1) Shake the instrument harness and bulk-head harness, rear harness.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1201 a current malfunction?              | Repair or replace the harness.  | Go to step 15.                                     |
| 15 <b>CHECK CONNECTOR.</b><br>1) Disconnect the connector used for CAN circuit.<br>2) Check the connector terminal.   | Is there poor contact of connector terminal? | Repair the connector terminal where poor contact exists, or replace harness.  | It is possible that temporary poor contact occurs. |
| 16 <b>CHECK HARNESS.</b><br>Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short) between terminals of data link connector and TCM.<br><br><b>Connector &amp; terminal</b><br><b>(B40) No. 14 — (B55) No. 17:</b><br><b>(B40) No. 6 — (B55) No. 18:</b>   | Is harness normal?                           | Replace the TCM.<br><Ref. to 4AT-61, REMOVAL, Transmission Control Module (TCM).>   | Repair or replace the harness.                     |
| 17 <b>CHECK HARNESS.</b><br>Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short) between terminals of data link connector and steering angle sensor.<br><br><b>Connector &amp; terminal</b><br><b>(B40) No. 14 — (B231) No. 1:</b><br><b>(B40) No. 6 — (B231) No. 2:</b>   | Is harness normal?                           | Replace the steering sensor. <Ref. to VDC-21, REPLACEMENT, Steering Angle Sensor.>  | Repair or replace the harness.                     |

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## LAN SYSTEM (DIAGNOSTICS)

| Step  | Check              | Yes   | No                             |
|---|--------------------|---|--------------------------------|
| <b>18</b><br><b>CHECK HARNESS.</b><br>Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short) between terminals of data link connector and yaw rate sensor.<br><i>Connector &amp; terminal</i><br><i>(B40) No. 14 — (B230) No. 3:</i><br><i>(B40) No. 6 — (B230) No. 2:</i> | Is harness normal? | Replace the yaw rate sensor. <Ref. to VDC-19, REMOVAL, Yaw Rate and G. Sensor.> | Repair or replace the harness. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### I: DTC U1202 CAN-HS BUS OFF

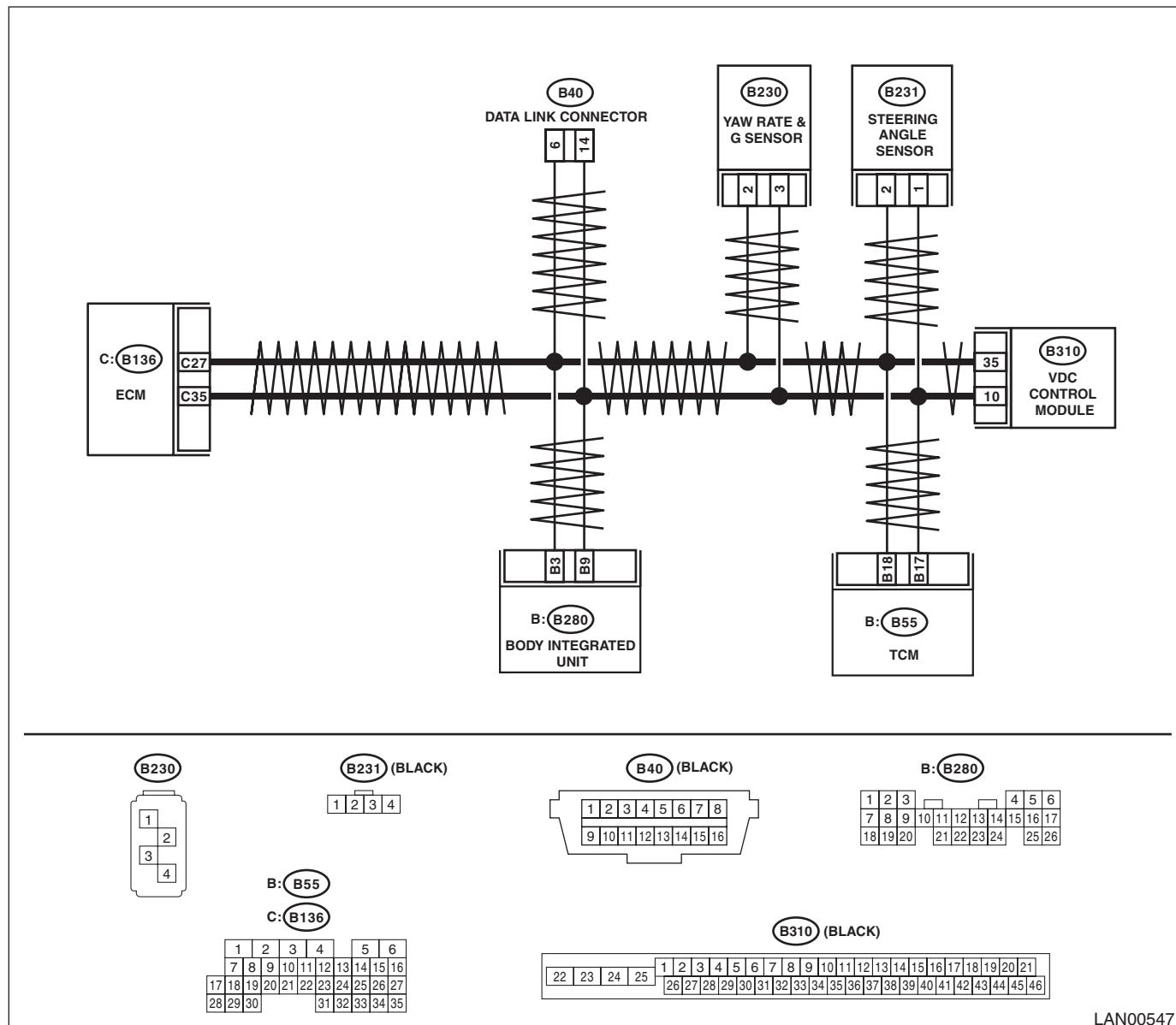
#### DTC DETECTING CONDITION:

Integrated unit communication is shut down because of high speed CAN error.

#### TROUBLE SYMPTOM:

Each warning light illuminates because the CAN communication (sending and receiving) is not normal.

#### WIRING DIAGRAM:



| Step  | Check   | Yes   | No             |
|---|---|---|----------------|
| 1 <b>CHECK DTC.</b><br>Using the Subaru Select Monitor, confirm all DTCs. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is any DTC other than for the body integrated unit displayed? | Perform the diagnosis according to displayed DTC. | Go to step 2.  |
| 2 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF → ON.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.                                 | Is U1202 a current malfunction?                               | Go to step 3.                                     | Go to step 10. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check                                 | Yes           | No  |
|---|---------------------------------------|---------------|---|
| 3 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1202 a current malfunction?       | Go to step 4. | Go to step 10.  |
| 4 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><i>(B40) No. 6 — (B136) No. 27:</i><br><i>(B40) No. 6 — (B310) No. 35:</i><br><i>(B40) No. 6 — (B230) No. 2:</i><br><i>(B40) No. 6 — (B231) No. 2:</i><br><i>(B40) No. 6 — (B55) No. 18:</i><br><i>(B40) No. 6 — (B280) No. 3:</i> | Is harness normal?                    | Go to step 5. | Repair or replace the harness.  |
| 5 <b>CHECK HARNESS.</b><br>Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><i>(B40) No. 14 — (B136) No. 35:</i><br><i>(B40) No. 14 — (B310) No. 10:</i><br><i>(B40) No. 14 — (B230) No. 3:</i><br><i>(B40) No. 14 — (B231) No. 1:</i><br><i>(B40) No. 14 — (B55) No. 17:</i><br><i>(B40) No. 14 — (B280) No. 9:</i>  | Is harness normal?                    | Go to step 6. | Repair or replace the harness.  |
| 6 <b>CHECK ECM.</b><br>1) Connect the ECM.<br>2) Using the tester, measure the resistance between terminals of data link connector.<br><b>Connector &amp; terminal</b><br><i>(B40) No. 6 — No. 14:</i>  | Is the resistance $120\pm5\ \Omega$ ? | Go to step 7. | Replace the ECM.<br><Ref. to FU(H4SO)-45, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(H4DOTC)-51, REMOVAL, Engine Control Module (ECM).> |
| 7 <b>CHECK VDC/ABS CM.</b><br>1) Disconnect the ECM connector (B136).<br>2) Connect the VDC/ABS CM.<br>3) Using the tester, measure the resistance between terminals of data link connector.<br><b>Connector &amp; terminal</b><br><i>(B40) No. 6 — No. 14:</i>   | Is the resistance $120\pm5\ \Omega$ ? | Go to step 8. | Replace the VDC/ABS CM. <Ref. to VDC-7, REMOVAL, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>                                    |

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

| Step   | Check   | Yes  | No  |
|--|---|--|---|
| 8 <b>CHECK HARNESS.</b><br>1) Connect the disconnected connectors.<br>2) Using the tester, measure the resistance between terminals of data link connector and chassis ground.<br><br><b>Connector &amp; terminal</b><br><b>(B40) No. 6 — Chassis ground:</b><br><b>(B40) No. 14 — Chassis ground:</b> | Is the resistance 1 MΩ or more?                           | Go to step 9.  | Go to step 12.  |
| 9 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to ON.<br>2) Using the tester, measure the voltage between terminals of data link connector and chassis ground.<br><br><b>Connector &amp; terminal</b><br><b>(B40) No. 6 — Chassis ground:</b><br><b>(B40) No. 14 — Chassis ground:</b>         | Is the voltage less than 6 V?                             | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Go to step 13.  |
| 10 <b>CHECK HARNESS.</b><br>1) Shake the harness.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1202 a current malfunction?                           | Repair or replace the harness.   | Go to step 11.  |
| 11 <b>CHECK CONNECTOR.</b><br>Disconnect the connector used for high speed CAN circuit.  | Is there poor contact of connector terminal?              | Repair the connector terminal, or replace harness.                                   | It is possible that temporary poor communication occurs.    |
| 12 <b>CHECK CONTROL MODULE.</b><br>With the tester connected, disconnect each control module connector.  | Is there any control module whose resistance has changed? | Replace the control module whose resistance has changed.                             | Repair or replace the open or short circuit of the harness. |
| 13 <b>CHECK ECM.</b><br>With the tester connected, disconnect each control module connector.   | Is there any control module whose voltage has changed?    | Replace the control module whose voltage has changed.                                | Repair or replace the short circuit of the harness.         |

### J: DTC U1211 CAN-HS ECM DATA ABNORMAL

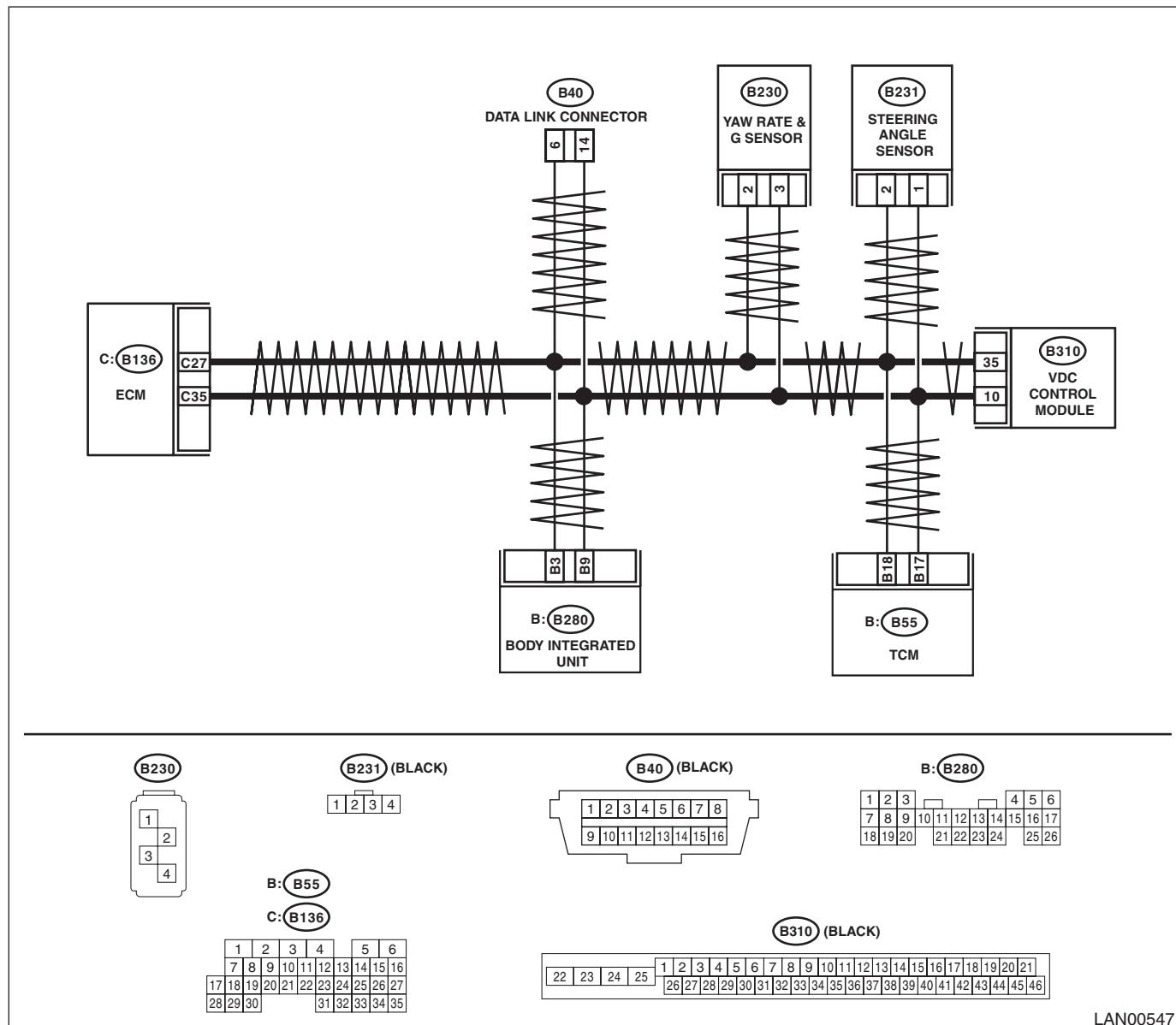
#### DTC DETECTING CONDITION:

Received error data from ECM.

#### TROUBLE SYMPTOM:

It is possible that engine control error may occur.

#### WIRING DIAGRAM:



LAN00547

| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| 1 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there DTC U1202?             | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1211 a current malfunction? | Go to step 3.                           | Go to step 4. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

| Step   | Check                               | Yes   | No   |
|--|-------------------------------------|---|--|
| <b>3 CHECK ECM.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector from ECM.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is U1211 a current malfunction?     | Replace the ECM.<br><Ref. to FU(H4SO)-45, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(H4DOTC)-51, REMOVAL, Engine Control Module (ECM).> | Go to step 4.  |
| <b>4 CHECK HARNESS.</b><br>1) Shake the harness used for CAN communication circuit.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1211 a current malfunction?     | Repair the poor contact or temporary open circuit of harness.   | Go to step 5.  |
| <b>5 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector that is connected to high speed CAN circuit.   | Is there poor contact of connector? | Repair the connector terminal where poor contact exists, or replace harness.  | It is possible that temporary poor communication occurs. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

## K: DTC U1212 CAN-HS TCM DATA ABNORMAL

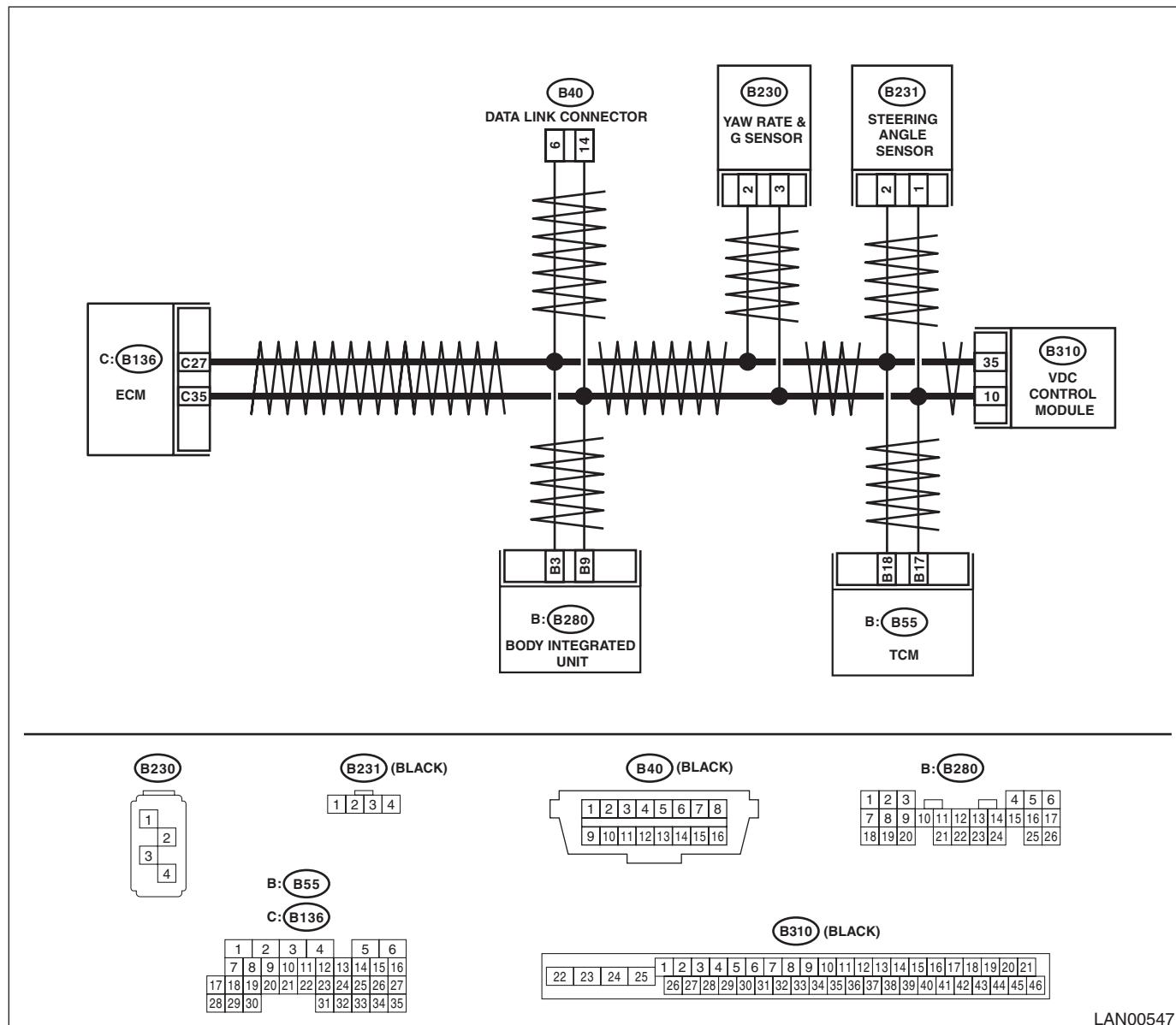
### DTC DETECTING CONDITION:

Received error data from TCM.

### TROUBLE SYMPTOM:

It is possible that transmission control error may occur.

### WIRING DIAGRAM:



| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| 1 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there DTC U1202?             | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1212 a current malfunction? | Go to step 3.                           | Go to step 4. |

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### LAN SYSTEM (DIAGNOSTICS)

| Step  | Check  | Yes  | No                             |
|---|--|--|--------------------------------|
| <b>3</b><br><b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the TCM connector.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is U1212 a current malfunction?              | Replace the TCM.<br><Ref. to 4AT-61, Transmission Control Module (TCM).> | Go to step 4.                  |
| <b>4</b><br><b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Shake the harness used for CAN communication circuit.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.                | Is U1212 a current malfunction?              | Repair or replace the harness.   | Go to step 5.                  |
| <b>5</b><br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector that is connected to high speed CAN circuit.  | Is there poor contact of connector terminal? | Repair the connector terminal, or replace harness.                       | Temporary poor contact occurs. |

### L: DTC U1213 CAN-HS VDC/ABS DATA ABNORMAL

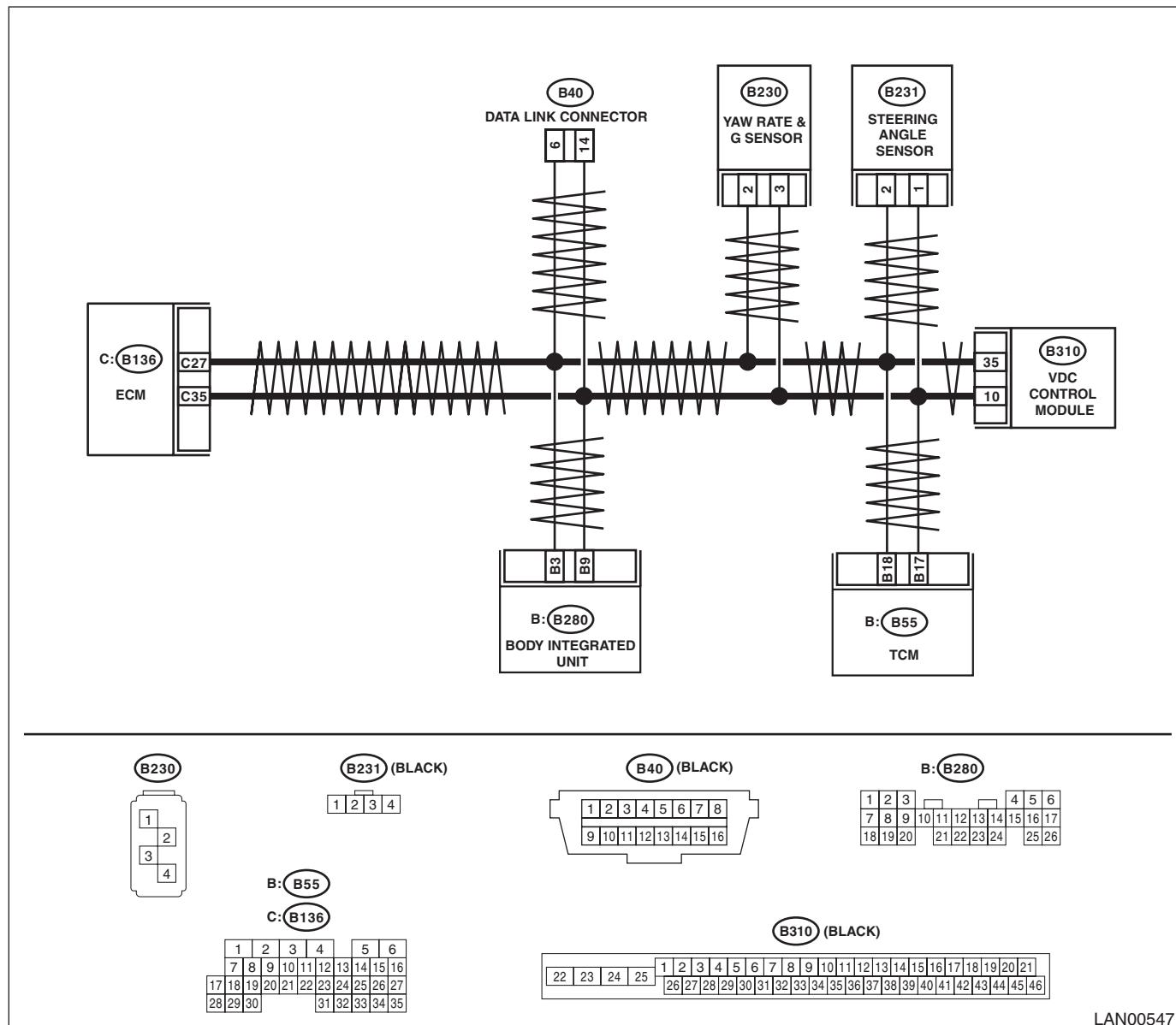
#### DTC DETECTING CONDITION:

Received error data from VDC/ABS module.

#### TROUBLE SYMPTOM:

It is possible that brake control error may occur.

#### WIRING DIAGRAM:



| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| 1 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there DTC U1202?             | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1213 a current malfunction? | Go to step 3.                           | Go to step 4. |

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### LAN SYSTEM (DIAGNOSTICS)

| Step   | Check  | Yes   | No   |
|--|--|---|--|
| <b>3 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the VDC/ABS CM connector.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is U1213 a current malfunction?              | Replace the VDC/ABS CM. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).> | Go to step 4.  |
| <b>4 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Shake the harness used for CAN communication circuit.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.                       | Is U1213 a current malfunction?              | Repair or replace the harness.  | Go to step 5.  |
| <b>5 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector that is connected to high speed CAN circuit.   | Is there poor contact of connector terminal? | Repair the connector terminal, or replace harness.  | It is possible that temporary poor communication occurs. |

M: DTC U1221 CAN-HS ECM NO-RECEIVE DATA

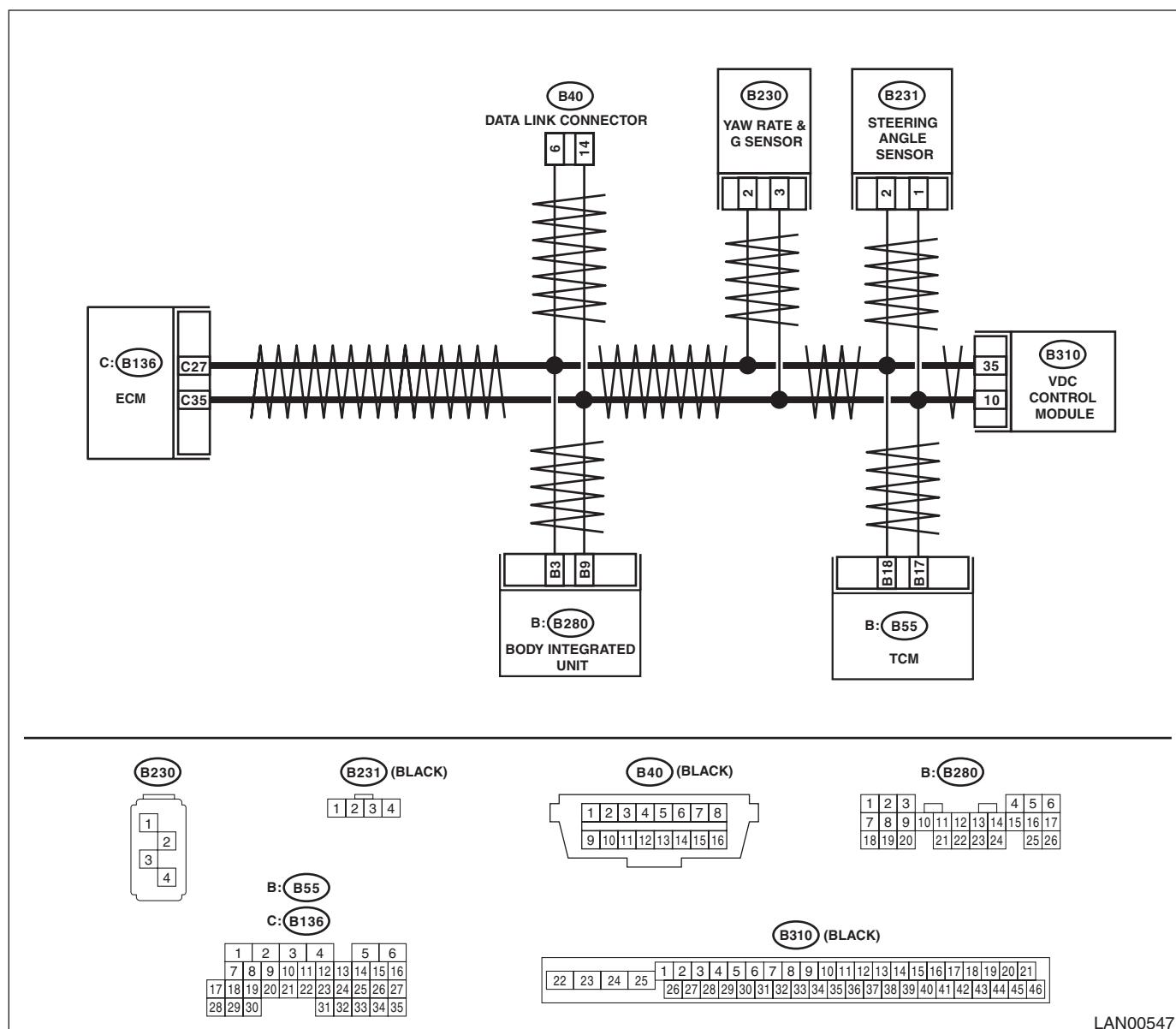
#### DTC DETECTING CONDITION:

Not received data from ECM.

## TROUBLE SYMPTOM:

Malfunction indicator light illuminates

## Malfunction Indicator **WIRING DIAGRAM**



| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| <b>1 CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there DTC U1202?             | Perform the diagnosis according to DTC. | Go to step 2. |
| <b>2 CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1221 a current malfunction? | Go to step 3.                           | Go to step 8. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

| Step  | Check                           | Yes   | No   |
|---|---------------------------------|---|--|
| 3 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1221 a current malfunction? | Go to step 4.   | Go to step 8.  |
| 4 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><i>Connector &amp; terminal</i><br><i>(B40) No. 6 — (B136) No. 27:</i><br><i>(B40) No. 6 — (B310) No. 35:</i><br><i>(B40) No. 6 — (B230) No. 2:</i><br><i>(B40) No. 6 — (B231) No. 2:</i><br><i>(B40) No. 6 — (B55) No. 18:</i><br><i>(B40) No. 6 — (B280) No. 3:</i> | Is harness normal?              | Go to step 5.   | Repair or replace the harness.   |
| 5 <b>CHECK HARNESS.</b><br>Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><i>Connector &amp; terminal</i><br><i>(B40) No. 14 — (B136) No. 35:</i><br><i>(B40) No. 14 — (B310) No. 10:</i><br><i>(B40) No. 14 — (B230) No. 3:</i><br><i>(B40) No. 14 — (B231) No. 1:</i><br><i>(B40) No. 14 — (B55) No. 17:</i><br><i>(B40) No. 14 — (B280) No. 9:</i>  | Is harness normal?              | Go to step 6.   | Repair or replace the harness.   |
| 6 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the disconnected connectors.<br>3) Start the engine and stop.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1221 a current malfunction? | Go to step 7.   | Go to step 8.  |
| 7 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.   | Is DTC P1718 or C0047 detected? | Replace the ECM.<br><Ref. to FU(H4SO)-45, REMOVAL, Engine Control Module (ECM).> <Ref. to FU(H4DOTC)-51, REMOVAL, Engine Control Module (ECM).> | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> |
| 8 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Shake the harness used for CAN communication circuit.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1221 a current malfunction? | Repair or replace the harness.  | Go to step 9.  |

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check  | Yes  | No                             |
|---|--|--|--------------------------------|
| 9<br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all the connector that is connected to high speed CAN circuit. | Is there poor contact of connector terminal? | Repair the connector terminal where poor contact exists, or replace harness. | Temporary poor contact occurs. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### N: DTC U1222 CAN-HS TCM NO-RECEIVE DATA

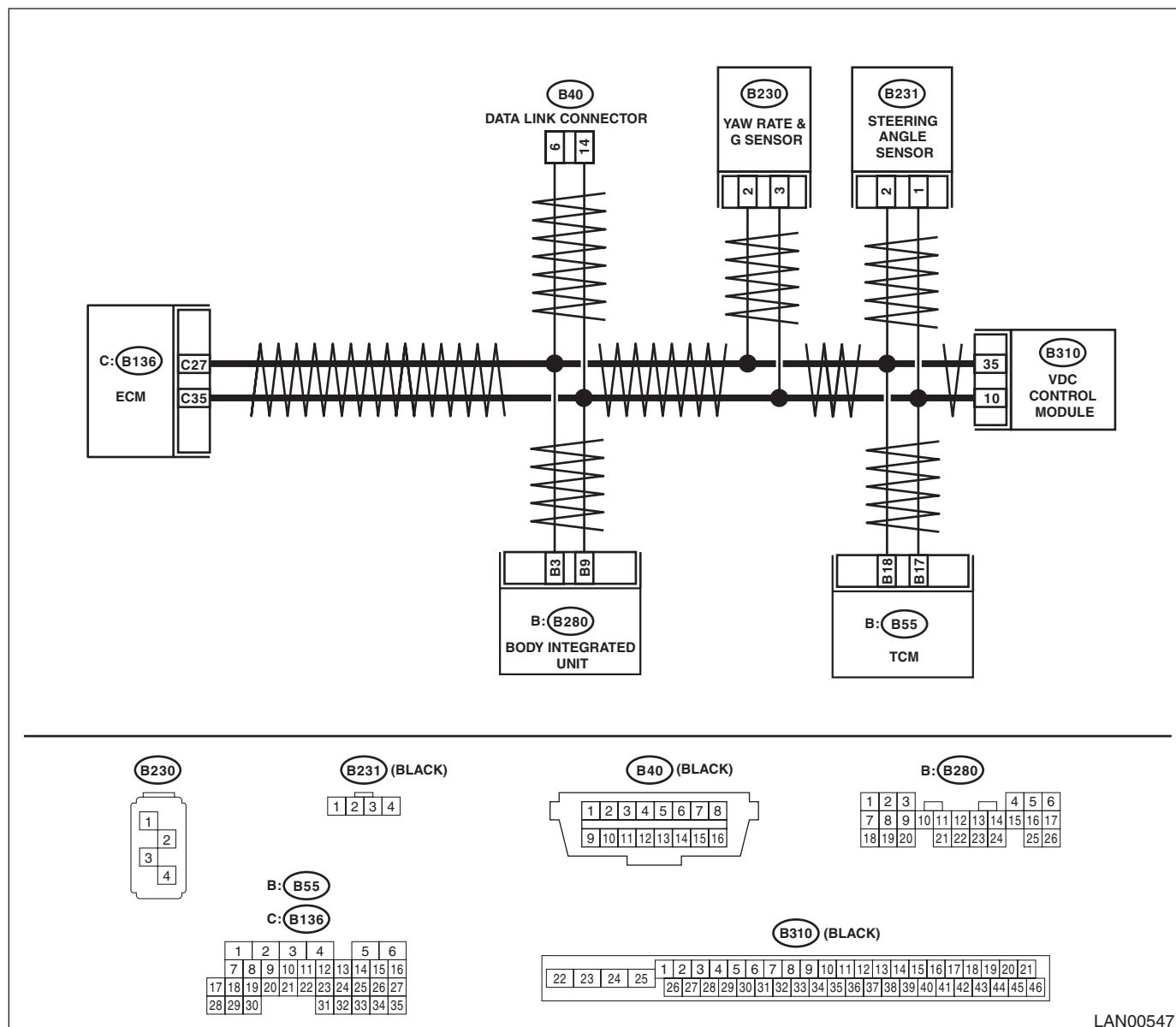
#### DTC DETECTING CONDITION:

Not received data from TCM.

#### TROUBLE SYMPTOM:

Malfunction indicator light illuminates.

#### WIRING DIAGRAM:



| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| 1 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there DTC U1202?             | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1222 a current malfunction? | Go to step 3.                           | Go to step 7. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step   | Check  | Yes  | No  |
|--|--|--|---|
| <b>3</b><br><b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1222 a current malfunction?              | Go to step 4.  | Go to step 7.   |
| <b>4</b><br><b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><b>(B55) No. 17—(B40) No. 14:</b><br><b>(B55) No. 18—(B40) No. 6:</b> | Is harness normal?                           | Go to step 5.  | Repair or replace the harness.  |
| <b>5</b><br><b>CHECK DTC.</b><br>1) Connect the disconnected connectors.<br>2) Start the engine and stop.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1222 a current malfunction?              | Go to step 6.  | Go to step 7.   |
| <b>6</b><br><b>CHECK DTC.</b><br>Using the Subaru Select Monitor, read all DTCs.   | Are DTCs U0101, C0047 or C0140 displayed?    | Replace the TCM.<br><Ref. to 4AT-61, Transmission Control Module (TCM).>     | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.‑> |
| <b>7</b><br><b>CHECK HARNESS.</b><br>1) Shake the harness used for CAN communication circuit.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1222 a current malfunction?              | Repair or replace the harness.   | Go to step 8.   |
| <b>8</b><br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all the connector that is connected to high speed CAN circuit.   | Is there poor contact of connector terminal? | Repair the connector terminal where poor contact exists, or replace harness. | Temporary poor contact occurs.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### O: DTC U1223 CAN-HS VDC/ABS NO-RECEIVE DATA

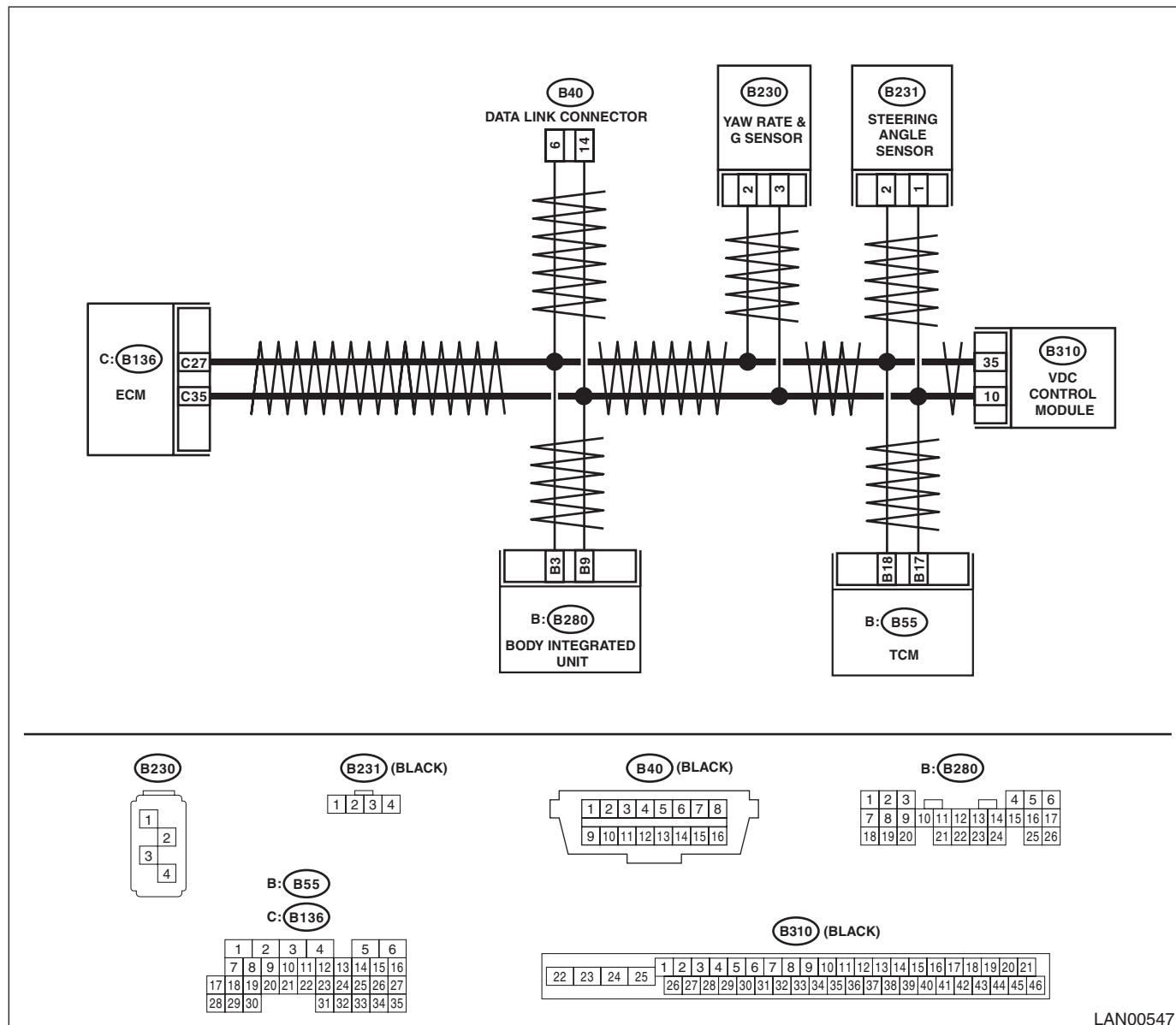
#### DTC DETECTING CONDITION:

Not received data from VDC/ABS CM.

#### TROUBLE SYMPTOM:

ABS warning light and VDC warning light illuminate.

#### WIRING DIAGRAM:



LAN00547

| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| 1 <b>CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is there DTC U1202?             | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1223 a current malfunction? | Go to step 3.                           | Go to step 7. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step   | Check  | Yes  | No  |
|--|--|--|---|
| <b>3 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1223 a current malfunction?                        | Go to step 4.  | Go to step 7.   |
| <b>4 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><b>(B40) No. 6 — (B310) No. 35:</b><br><b>(B40) No. 14 — (B310) No. 10:</b> | Is harness normal?                                     | Go to step 5.  | Repair or replace the harness.  |
| <b>5 CHECK DTC.</b><br>1) Connect the disconnected connectors.<br>2) Start the engine.<br>3) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1223 a current malfunction?                        | Go to step 6.  | Go to step 7.   |
| <b>6 CHECK DTC.</b><br>Read all DTCs using the Subaru Select Monitor.  | Is P1718 or U0122 displayed?                           | Replace the VDC/ABS CM. <Ref. to VDC-7, REMOVAL, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).> | Replace the body integrated unit. <Ref. to SL-49, REMOVAL, Body Integrated Unit.> |
| <b>7 CHECK HARNESS.</b><br>1) Shake the harness used for CAN communication circuit.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1223 a current malfunction?                        | Repair or replace the harness.   | Go to step 8.   |
| <b>8 CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line.  | Is there connector terminal where poor contact exists? | Repair the connector terminal where poor contact exists, or replace harness.                                 | Temporary poor contact occurs.  |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### P: DTC U1300 CAN-LS MALFUNCTION

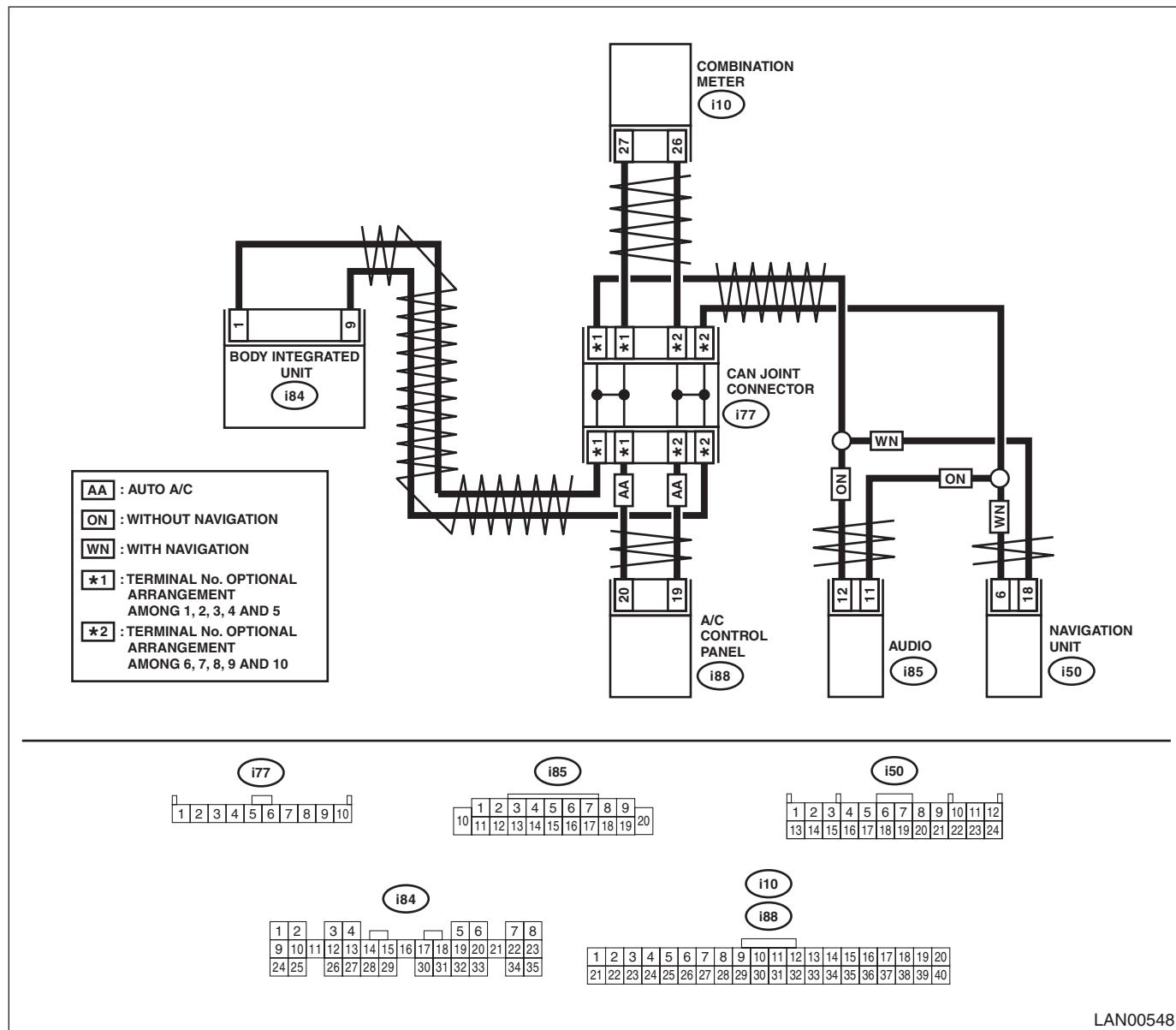
#### DTC DETECTING CONDITION:

Open or short in low speed CAN circuit

#### TROUBLE SYMPTOM:

No influence.

#### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is U1300 a current malfunction? | Go to step 2. | Go to step 7. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check                           | Yes   | No  |
|---|---------------------------------|---|---|
| <b>2 CHECK DTC.</b><br>1) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>2) Connect the disconnected connectors.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1300 a current malfunction? | Go to step 3.   | Go to step 7.   |
| <b>3 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><br><b>Connector &amp; terminal</b><br><i>(i84) No. 1 — (i10) No. 27 (combination meter):</i><br><i>(i84) No. 9 — (i10) No. 26 (combination meter):</i><br><i>(i84) No. 1 — (i88) No. 20 (auto A/C):</i><br><i>(i84) No. 9 — (i88) No. 19 (auto A/C):</i><br><i>(i84) No. 1 — (i85) No. 12 (audio):</i><br><i>(i84) No. 9 — (i85) No. 11 (audio):</i><br><i>(i84) No. 1 — (i50) No. 18 (navigation):</i><br><i>(i84) No. 9 — (i50) No. 6 (navigation):</i> | Is harness normal?              | Go to step 4.   | Repair or replace the harness.  |
| <b>4 CHECK AUDIO OR NAVIGATION.</b><br>1) Connect the disconnected connectors.<br>2) Disconnect the connector of navigation (i85) or audio (i50).<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1300 a current malfunction? | Go to step 5.   | Replace the navigation or audio.<br><Ref. to ET-6, REMOVAL, Audio.>                           |
| <b>5 CHECK AUTO A/C CONTROL MODULE.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the audio or navigation connectors.<br>3) Disconnect the auto A/C control module connector (i88).<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1300 a current malfunction? | Go to step 6.   | Replace the auto A/C control module. <Ref. to AC-32, REMOVAL, Control Unit (Auto A/C Model).> |
| <b>6 CHECK BODY INTEGRATED UNIT.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the auto A/C control module.<br>3) Replace the body integrated unit of your vehicle with the body integrated unit from other vehicle, which is working normally.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1300 a current malfunction? | Replace the combination meter.<br><Ref. to IDI-15, REMOVAL, Combination Meter.> | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.>          |
| <b>7 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Shake the harness used for CAN communication circuit.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1300 a current malfunction? | Repair or replace the harness.  | Go to step 8.   |

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### LAN SYSTEM (DIAGNOSTICS)

| Step  | Check  | Yes  | No                             |
|---|--|--|--------------------------------|
| <b>8</b><br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connector that is connected to low speed CAN circuit. | Is there poor contact at disconnected connector? | Repair the connector terminal, or replace harness. | Temporary poor contact occurs. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

## Q: DTC U1301 CAN-LS COUNTER ABNORMAL

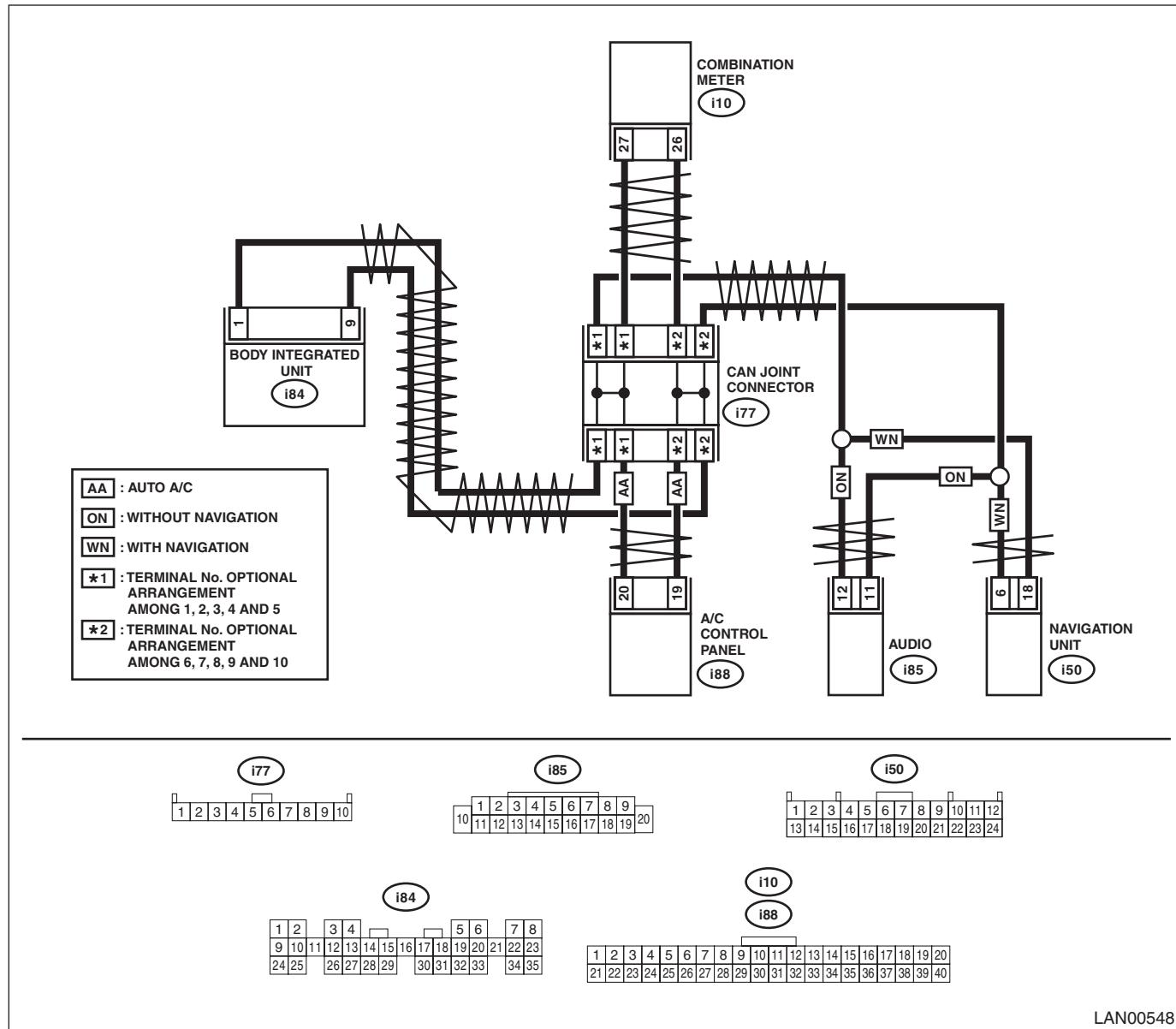
### DTC DETECTING CONDITION:

Communication is unstable because of low speed CAN communication error.

### TROUBLE SYMPTOM:

Display error may occur in fuel gauge because the CAN communication is not transmitted (sending/receiving) normally.

### WIRING DIAGRAM:



LAN00548

| Step   | Check                           | Yes                                     | No            |
|--|---------------------------------|---|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Are there DTC U1300 or U1302?   | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1301 a current malfunction? | Go to step 3.                           | Go to step 9. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

| Step  | Check  | Yes  | No  |
|---|--|--|---|
| <b>3 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1301 a current malfunction?                | Go to step 4.  | Go to step 9.   |
| <b>4 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><b>(i84) No. 1 — (i10) No. 27 (combination meter):</b><br><b>(i84) No. 9 — (i10) No. 26 (combination meter):</b><br><b>(i84) No. 1 — (i88) No. 20 (auto A/C):</b><br><b>(i84) No. 9 — (i88) No. 19 (auto A/C):</b><br><b>(i84) No. 1 — (i85) No. 12 (audio):</b><br><b>(i84) No. 9 — (i85) No. 11 (audio):</b><br><b>(i84) No. 1 — (i50) No. 18 (navigation):</b><br><b>(i84) No. 9 — (i50) No. 6 (navigation):</b> | Is harness normal?                             | Go to step 5.  | Repair or replace the harness.  |
| <b>5 CHECK AUDIO OR NAVIGATION.</b><br>1) Connect the disconnected connectors.<br>2) Disconnect the connector of navigation (i85) or audio (i50).<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1301 a current malfunction?                | Go to step 6.  | Replace the audio or navigation.<br><Ref. to ET-6, REMOVAL, Audio.>                           |
| <b>6 CHECK AUTO A/C CONTROL MODULE.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the audio or navigation module.<br>3) Disconnect the auto A/C control module connector (i88).<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1301 a current malfunction?                | Go to step 7.  | Replace the auto A/C control module. <Ref. to AC-32, REMOVAL, Control Unit (Auto A/C Model).> |
| <b>7 CHECK COMBINATION METER.</b><br>1) Turn the ignition switch to OFF.<br>2) Connect the disconnected connectors.<br>3) Perform the self-diagnosis of combination meter. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>   | Is the self-diagnosis of combination meter OK? | Go to step 8.  | Replace the combination meter. <Ref. to IDI-15, REMOVAL, Combination Meter.>                  |
| <b>8 CHECK BODY INTEGRATED UNIT.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1301 a current malfunction?                | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Go to step 9.   |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step   | Check  | Yes  | No                             |
|--|--|--|--------------------------------|
| <b>9</b><br><b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Shake the harness used for low speed CAN communication circuit.<br>3) Turn the ignition switch to ON.<br>4) Read the DTC of body integrated unit using Subaru Select Monitor. | Is U1301 a current malfunction?              | Repair or replace the harness.                     | Go to step <b>10</b> .         |
| <b>10</b><br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.  | Is there poor contact of connector terminal? | Repair the connector terminal, or replace harness. | Temporary poor contact occurs. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### R: DTC U1302 CAN-LS BUS OFF

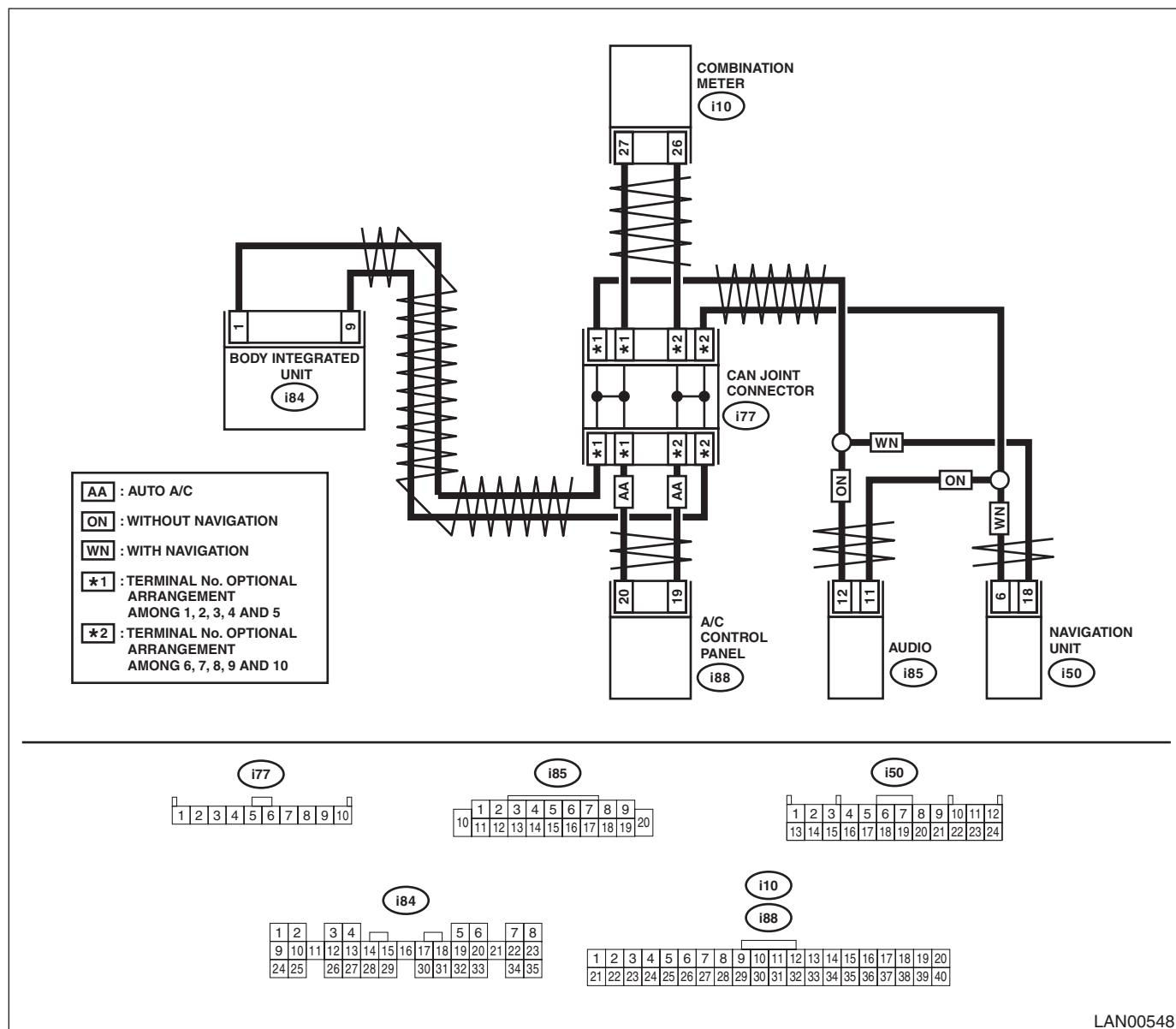
#### DTC DETECTING CONDITION:

Integrated unit communication is shut down because of low speed CAN communication error.

#### TROUBLE SYMPTOM:

Display error may occur in fuel gauge because the CAN communication is not transmitted (sending/receiving) normally.

#### WIRING DIAGRAM:



| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is U1302 a current malfunction? | Go to step 2. | Go to step 8. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check   | Yes  | No  |
|---|---|--|---|
| 2 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1302 a current malfunction?                           | Go to step 3.  | Go to step 8.                                       |
| 3 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><i>(i84) No. 1 — (i10) No. 27 (combination meter):</i><br><i>(i84) No. 9 — (i10) No. 26 (combination meter):</i><br><i>(i84) No. 1 — (i88) No. 20 (auto A/C):</i><br><i>(i84) No. 9 — (i88) No. 19 (auto A/C):</i><br><i>(i84) No. 1 — (i85) No. 12 (audio):</i><br><i>(i84) No. 9 — (i85) No. 11 (audio):</i><br><i>(i84) No. 1 — (i50) No. 18 (navigation):</i><br><i>(i84) No. 9 — (i50) No. 6 (navigation):</i> | Is harness normal?  | Go to step 4.  | Repair or replace the harness.                      |
| 4 <b>CHECK HARNESS.</b><br>1) Connect the disconnected connectors.<br>2) Using the tester, measure the resistance between harness connector and chassis ground.<br><b>Connector &amp; terminal</b><br><i>(i84) No. 1 — Chassis ground:</i><br><i>(i84) No. 9 — Chassis ground:</i>  | Is the resistance 1 MΩ or more?                           | Go to step 5.  | Go to step 7.                                       |
| 5 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to ON.<br>2) Using the tester, measure the voltage between harness connector and chassis ground.<br><b>Connector &amp; terminal</b><br><i>(i84) No. 1 (+) — Chassis ground (-):</i><br><i>(i84) No. 9 (+) — Chassis ground (-):</i>  | Is the voltage less than 6 V?                             | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit.> | Go to step 6.                                       |
| 6 <b>CHECK HARNESS.</b><br>With the tester connected, disconnect control module.  | Is there any control module whose voltage has changed?    | Replace the control module whose voltage has changed.                                | Repair or replace the short circuit of the harness. |
| 7 <b>CHECK HARNESS.</b><br>With the tester connected, disconnect control module.  | Is there any control module whose resistance has changed? | Replace the control module whose resistance has changed.                             | Repair or replace the short circuit of the harness. |
| 8 <b>CHECK HARNESS.</b><br>1) Shake the harness used for low speed CAN communication circuit.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1302 a current malfunction?                           | Repair or replace the open, short circuit of the harness.                            | Go to step 9.                                       |

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### LAN SYSTEM (DIAGNOSTICS)

| Step   | Check  | Yes  | No                             |
|--|--|--|--------------------------------|
| <b>9</b><br><b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line. | Is there poor contact of connector terminal? | Repair the connector terminal, or replace harness. | Temporary poor contact occurs. |

## S: DTC U1311 CAN-LS METER UNIT DATA ABNORMAL

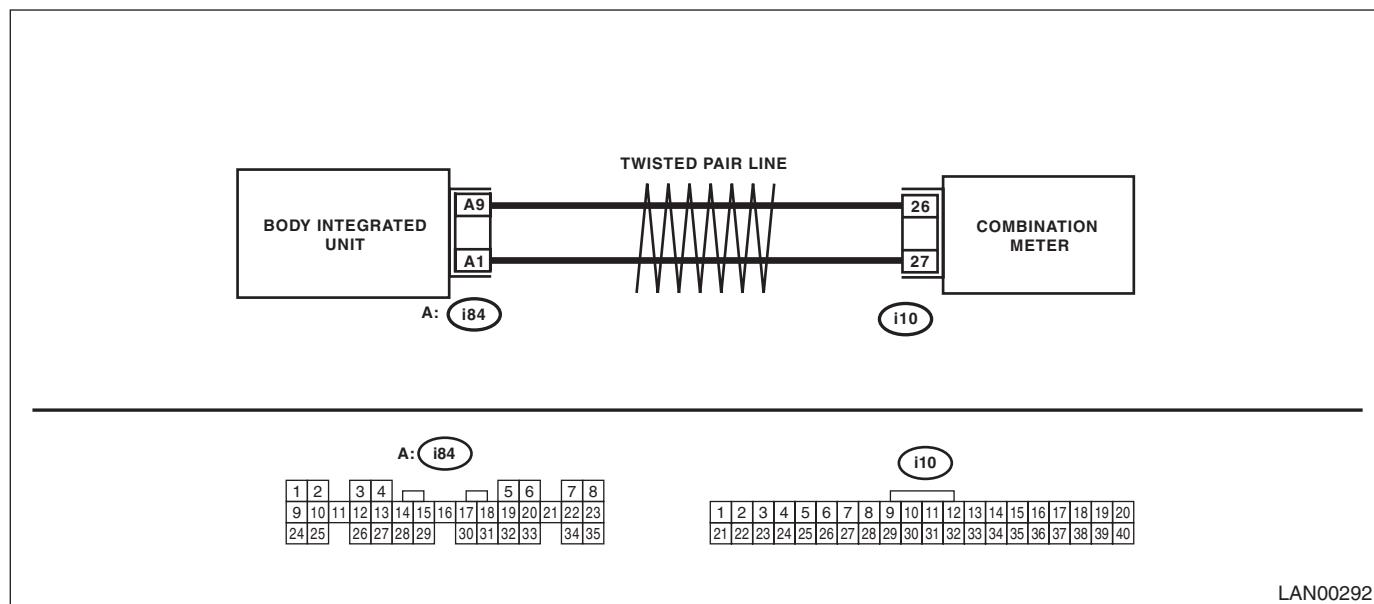
### DTC DETECTING CONDITION:

Received error data from meter.

### TROUBLE SYMPTOM:

Defective data from combination meter occurs.

### WIRING DIAGRAM:



| Step  | Check  | Yes  | No                             |
|---|--|--|--------------------------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>  | Is DTC U1300 or U1302 displayed?             | Perform the diagnosis according to DTC.                                      | Go to step 2.                  |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1311 a current malfunction?              | Go to step 3.  | Go to step 4.                  |
| 3 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the combination meter connector (i10).<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is U1311 a current malfunction?              | Replace the combination meter. <Ref. to IDI-15, REMOVAL, Combination Meter.> | Go to step 4.                  |
| 4 <b>CHECK HARNESS.</b><br>1) Shake the harness used for low speed CAN communication circuit.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1311 a current malfunction?              | Repair or replace the harness.   | Go to step 5.                  |
| 5 <b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.  | Is there poor contact of connector terminal? | Repair the connector terminal, or replace harness.                           | Temporary poor contact occurs. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### T: DTC U1321 CAN-LS METER NO-RECEIVE DATA

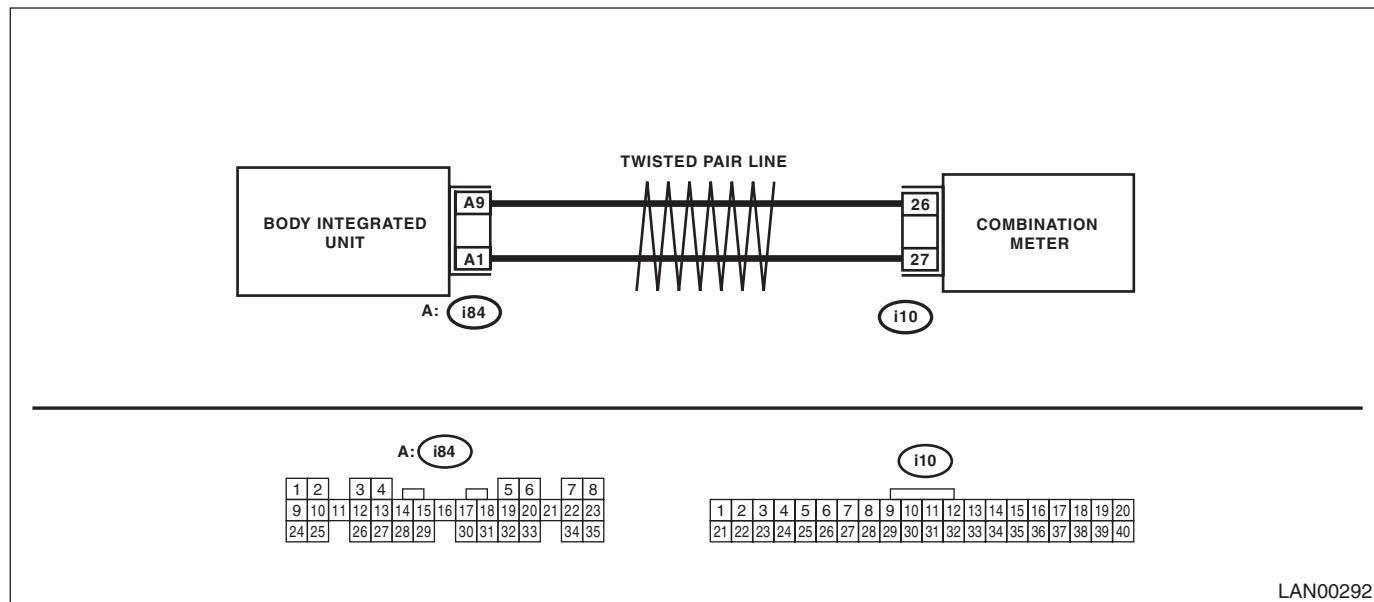
#### DTC DETECTING CONDITION:

Not received data from meter.

#### TROUBLE SYMPTOM:

Engine may not be started.

#### WIRING DIAGRAM:



| Step  | Check                           | Yes                                     | No            |
|---|---------------------------------|---|---------------|
| 1 <b>CHECK ALL DTCs.</b><br>Read all DTCs using the Subaru Select Monitor.<br><Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>   | Is U1300 or U1302 displayed?    | Perform the diagnosis according to DTC. | Go to step 2. |
| 2 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor.  | Is U1321 a current malfunction? | Go to step 3.                           | Go to step 7. |
| 3 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor. | Is U1321 a current malfunction? | Go to step 4.                           | Go to step 7. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step  | Check  | Yes   | No   |
|---|--|---|--|
| 4 <b>CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><b>Connector &amp; terminal</b><br><i>(i84) No. 1 — (i10) No. 27 (combination meter):</i><br><i>(i84) No. 9 — (i10) No. 26 (combination meter):</i><br><i>(i84) No. 1 — (i88) No. 20 (auto A/C):</i><br><i>(i84) No. 9 — (i88) No. 19 (auto A/C):</i><br><i>(i84) No. 1 — (i85) No. 12 (audio):</i><br><i>(i84) No. 9 — (i85) No. 11 (audio):</i><br><i>(i84) No. 1 — (i50) No. 18 (navigation):</i><br><i>(i84) No. 9 — (i50) No. 6 (navigation):</i> | Is harness normal?                           | Go to step 5.   | Repair or replace the harness.   |
| 5 <b>CHECK COMBINATION METER.</b><br>1) Connect the disconnected connectors.<br>2) Perform the self-diagnosis of combination meter. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>  | Is the self-diagnosis OK?                    | Go to step 6.   | Replace the combination meter.<br><Ref. to IDI-15, REMOVAL, Combination Meter. > |
| 6 <b>CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1321 a current malfunction?              | Replace the body integrated unit.<br><Ref. to SL-49, REMOVAL, Body Integrated Unit. > | Go to step 7.  |
| 7 <b>CHECK DTC.</b><br>1) Shake the harness used for low speed CAN communication circuit.<br>2) Read the DTC of body integrated unit using Subaru Select Monitor.   | Is U1321 a current malfunction?              | Repair the poor contact, open circuit of harness or replace harness.                  | Go to step 8.  |
| 8 <b>CHECK CONNECTOR.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect all connectors (i84, i10, i88, i85 or i50) that are connected to low speed CAN communication line.  | Is there poor contact of connector terminal? | Repair the connector terminal, or replace harness.                                    | It is possible that temporary poor communication occurs.                         |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## LAN SYSTEM (DIAGNOSTICS)

### U: DTC B1500 KEYLESS UART COM. MALFUNCTION

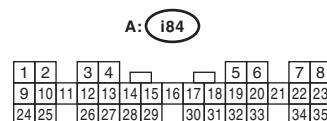
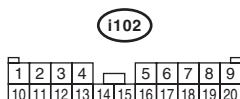
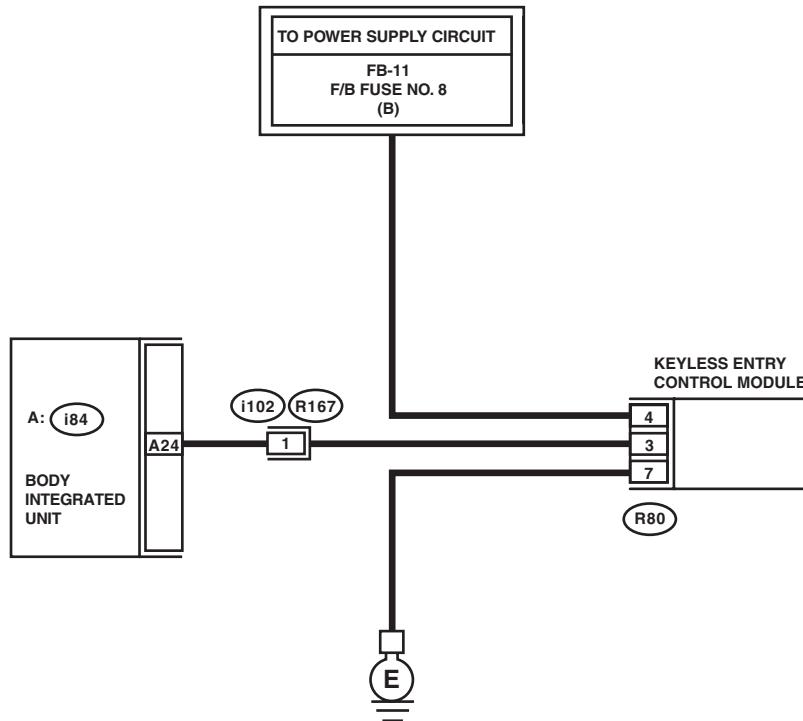
#### DTC DETECTING CONDITION:

Open or short circuit in keyless UART circuit

#### TROUBLE SYMPTOM:

Door lock does not operate with keyless.

#### WIRING DIAGRAM:



LAN00434

| Step   | Check                           | Yes           | No            |
|--|---------------------------------|---------------|---------------|
| 1 <b>CHECK DTC.</b><br>Read the DTC of body integrated unit using Subaru Select Monitor. <Ref. to LAN(diag)-15, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.> | Is B1500 a current malfunction? | Go to step 2. | Go to step 7. |

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

| Step   | Check                                     | Yes   | No  |
|--|---|---|---|
| <b>2 CHECK DTC.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connectors from body integrated unit and keyless entry control module.<br>3) Connect the disconnected connectors.<br>4) Turn the ignition switch to ON.<br>5) Read the DTC of body integrated unit using Subaru Select Monitor.  | Is B1500 a current malfunction?           | Go to step 3.   | Go to step 7.   |
| <b>3 CHECK HARNESS.</b><br>1) Turn the ignition switch to OFF.<br>2) Disconnect the connectors from body integrated unit and keyless entry control module.<br>3) Using the tester, inspect the open circuit of harness and short (power supply-output short, GND-output short).<br><br><i>Connector &amp; terminal</i><br><i>(i84) No. 24 — (R80) No. 3:</i> | Is harness normal?                        | Go to step 4.   | Repair or replace the harness.  |
| <b>4 CHECK HARNESS.</b><br>Using the tester, measure the voltage between keyless entry control module and chassis ground.<br><br><i>Connector &amp; terminal</i><br><i>(R80) No. 4 (+) — Chassis ground (-):</i>   | Is the voltage battery voltage?           | Go to step 5.   | Check the power supply circuit for keyless entry control module.                  |
| <b>5 CHECK HARNESS.</b><br>Using the tester, measure the resistance between keyless entry control module and chassis ground.<br><br><i>Connector &amp; terminal</i><br><i>(R80) No. 7 — Chassis ground:</i>  | Is the resistance less than 10 $\Omega$ ? | Go to step 6.   | Repair the open circuit of harness or replace harness.                            |
| <b>6 CHECK OPERATION.</b><br>1) Install the keyless entry control module from other vehicle, which is working normally.<br>2) Register the keyless key which is working normally.<br>3) Operate the keyless key.   | Is the door locking operate?              | Replace the keyless entry control module. <Ref. to SL-47, REMOVAL, Keyless Entry Control Module.> | Replace the body integrated unit. <Ref. to SL-49, REMOVAL, Body Integrated Unit.> |
| <b>7 CHECK CONNECTOR.</b><br>Disconnect the connectors from body integrated unit and keyless entry control module.   | Is there poor contact of connector?       | Repair the connector, or replace harness.   | Temporary poor contact occurs.  |