12.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

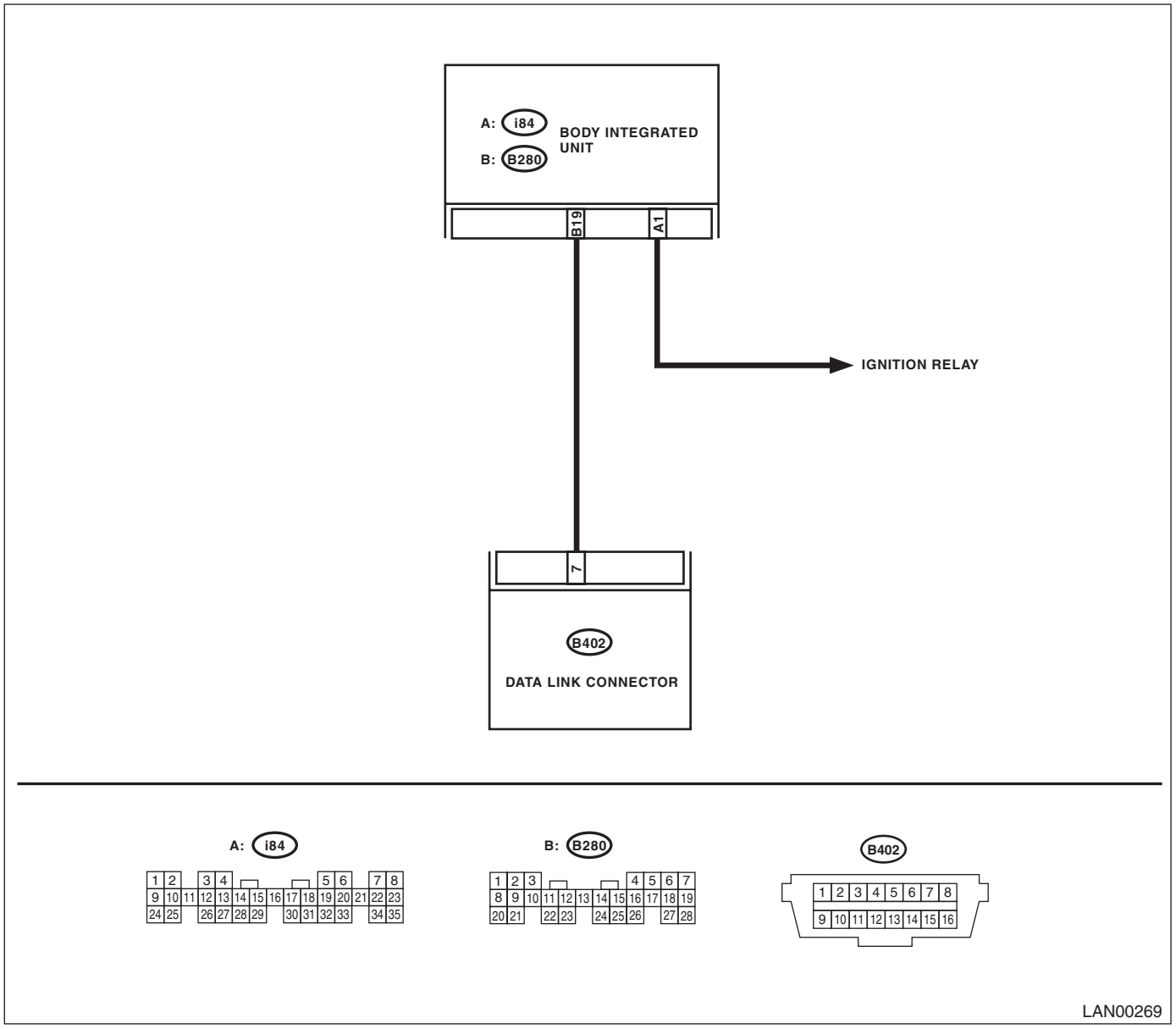
A: COMMUNICATION FOR INITIALIZING IMPOSSIBLE

NOTE:
- DTC is displayed in the sequence of the amount of counter numbers.
- When more than two DTCs are displayed, perform the diagnosis of top one.

DIAGNOSIS:
- Subaru Select Monitor communication line is open or shorted.
- Back-up power supply circuit malfunction

TROUBLE SYMPTOM:
Not communicable with Subaru Select Monitor.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK IGNITION SWITCH.**	Is the ignition switch ON?	Go to step **2**.	Turn the ignition switch to ON, and select Integ. unit mode using Subaru Select Monitor.
2	**CHECK BATTERY.** 1) Turn the ignition switch to OFF. 2) Measure the battery voltage.	Is the voltage 11 V or more?	Go to step **3**.	Charge or replace the battery.
3	**CHECK BATTERY TERMINAL.**	Is there poor contact at the battery terminal?	Repair or tighten the battery terminal.	Go to step **4**.
4	**CHECK COMMUNICATION OF SUBARU SELECT MONITOR.** 1) Turn the ignition switch to ON. 2) Using the Subaru Select Monitor, check whether communication to other system can be executed normally.	Is the system name displayed?	Go to step **7**.	Go to step **5**.
5	**CHECK COMMUNICATION OF SUBARU SELECT MONITOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector. 3) Turn the ignition switch to ON. 4) Check whether communication to other system can be executed normally.	Is the system name displayed?	Go to step **7**.	Go to step **6**.
6	**CHECK HARNESS CONNECTOR BETWEEN EACH CONTROL MODULE AND SUBARU SELECT MONITOR.** 1) Turn the ignition switch to ON. 2) Disconnect the body integrated unit connector. 3) Measure the resistance between data link connector and chassis ground. ***Connector & terminal*** ***(B402) No. 7 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair the harness and connector between each control module and Subaru Select Monitor.
7	**CHECK OUTPUT SIGNAL TO BODY INTEGRATED UNIT.** 1) Turn the ignition switch to ON. 2) Measure the voltage between body integrated unit and chassis ground. ***Connector & terminal*** ***(B402) No. 7 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair the harness and connector between each control module and Subaru Select Monitor.
8	**CHECK HARNESS CONNECTOR BETWEEN BODY INTEGRATED UNIT AND DATA LINK CONNECTOR.** Measure the resistance between body integrated unit and data link connector. ***Connector & terminal*** ***(B402) No. 7 — (B280) No. 19:***	Is the resistance less than 1 Ω?	Go to step **9**.	Repair the harness and connector between body integrated unit and Subaru Select Monitor.
9	**CHECK INSTALLATION OF BODY INTEGRATED UNIT CONNECTOR.** Turn the ignition switch to OFF.	Is the body integrated unit connector inserted into body integrated unit until the clamp locks onto it?	Go to step **10**.	Insert the body integrated unit connector into body integrated unit.
10	**CHECK POWER SUPPLY CIRCUIT.** 1) Turn the ignition switch to ON (engine OFF). 2) Measure the ignition voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(i84) No. 1 (+) — Chassis ground (–):***	Is the voltage 10 V or more?	Go to step **11**.	Repair the open circuit of harness between body integrated unit and battery.

	Step	Check	Yes	No
11	**CHECK HARNESS CONNECTOR BETWEEN BODY INTEGRATED UNIT AND CHASSIS GROUND.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit. 3) Measure the resistance of harness between the body integrated unit and chassis ground. ***Connector & terminal*** ***(B280) No. 19 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **12**.	Repair the poor contact of harness between body integrated unit and ground.
12	**CHECK POOR CONTACT OF CONNECTORS.**	Is there poor contact at control module ground and Subaru Select Monitor?	Repair the poor contact of connector.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>

CAUTION:
When replacing body integrated unit on the model with immobilizer system, refer to the "PC application help for Subaru Select Monitor".

B: DTC B1100 INTEG. UNIT SYSTEM ERROR

DTC DETECTING CONDITION:
System error in body integrated unit
TROUBLE SYMPTOM:
- Check light comes on in the combination meter, and displays communication error display "Er IU".
- LAN communication immobilizer function may not be executed normally.

	Step	Check	Yes	No
1	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is the DTC B1100 displayed currently malfunctioning?	Go to step **2**.	Temporary EEPROM access error occurred.
2	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is the DTC B1100 displayed currently malfunctioning?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Temporary EEPROM access error occurred.

C: DTC B1101 BATT P/SUPPLY MALFUNCTION CONT

DTC DETECTING CONDITION:

- Battery power supply backup circuit is open or shorted.
- Battery voltage is too high or too low.

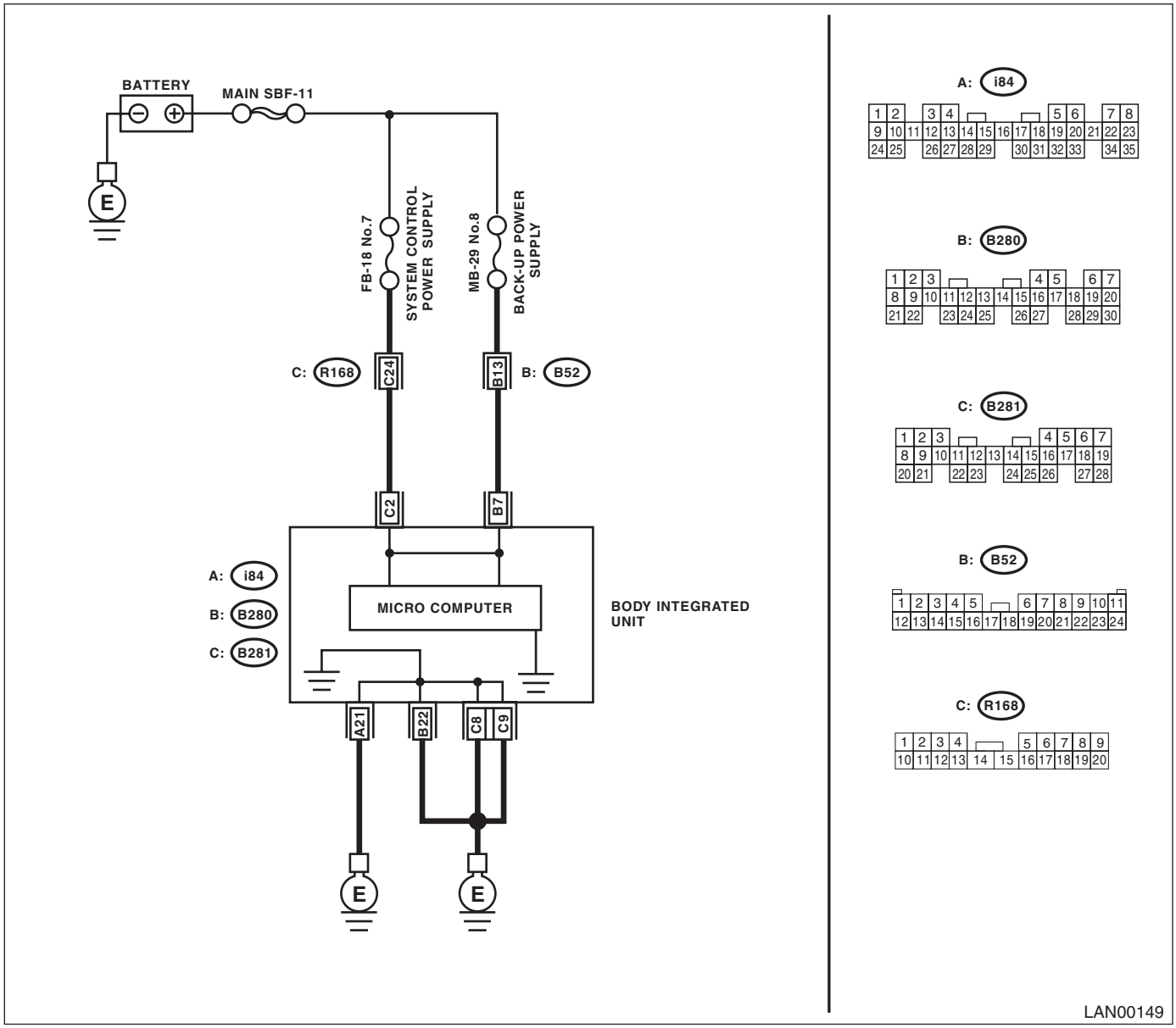
TROUBLE SYMPTOM:

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.

WIRING DIAGRAM:

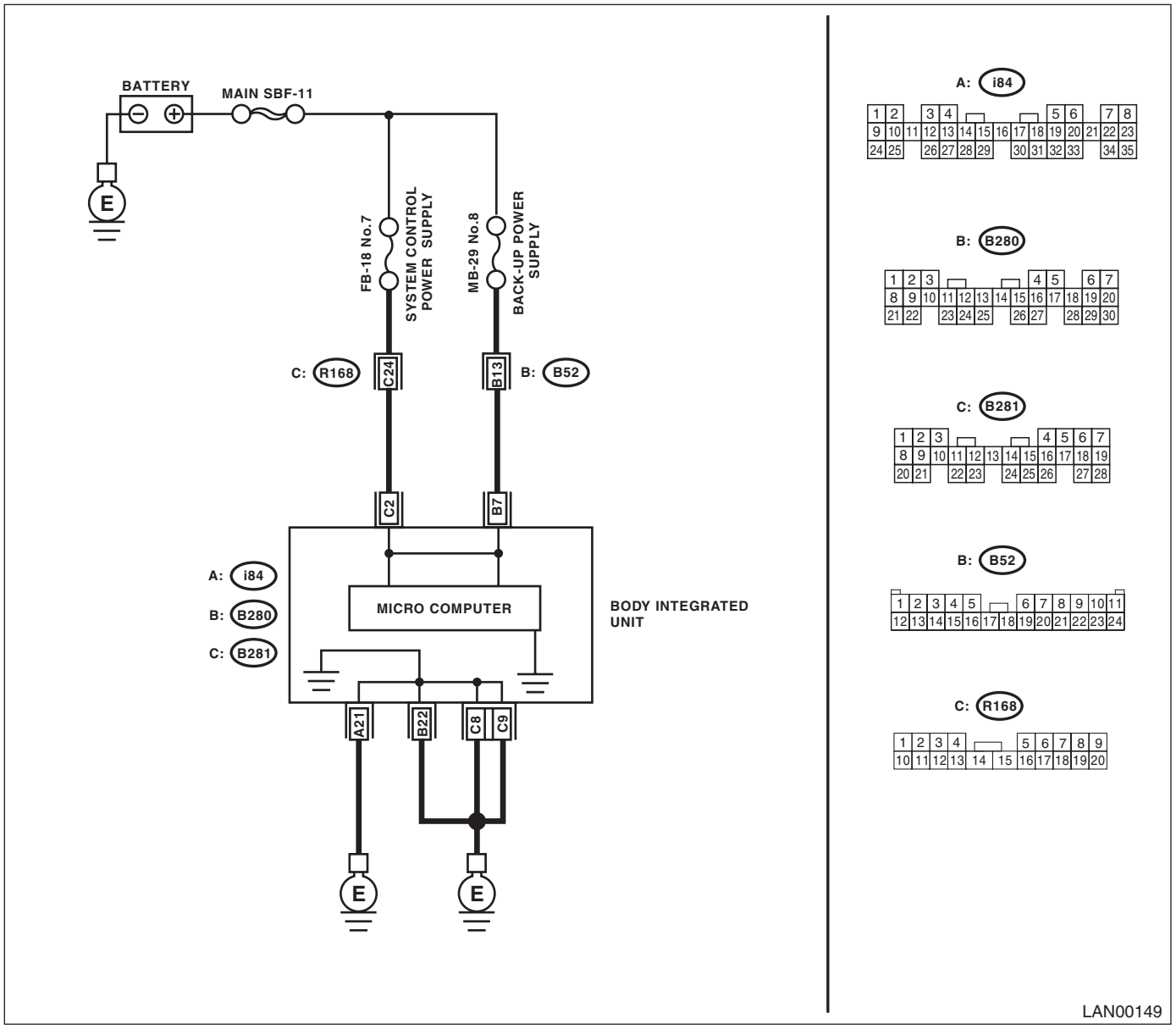


	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1101 current malfunction?	Go to step **2**.	Go to step **5**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit and reconnect. 3) Wait approx. 2 minutes. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1101 current malfunction?	Go to step **3**.	Go to step **5**.
3	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Inspect the fuse.	Is the fuse OK?	Go to step **4**.	Replace the defective fuse.
4	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B281). 2) Measure the voltage between body integrated unit connector and chassis ground using tester. ***Connector & terminal*** ***(B281) No. 2 (+) — Chassis ground (–):***	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Repair or replace the open or shorted circuit between body integrated unit and fuse.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B281).	Is there poor contact in connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

D: DTC B1102 BATT P/SUPPLY MALFUNCTION BACKUP

DTC DETECTING CONDITION:
Back-up power supply circuit input voltage is too high or too low.
TROUBLE SYMPTOM:
No influence.

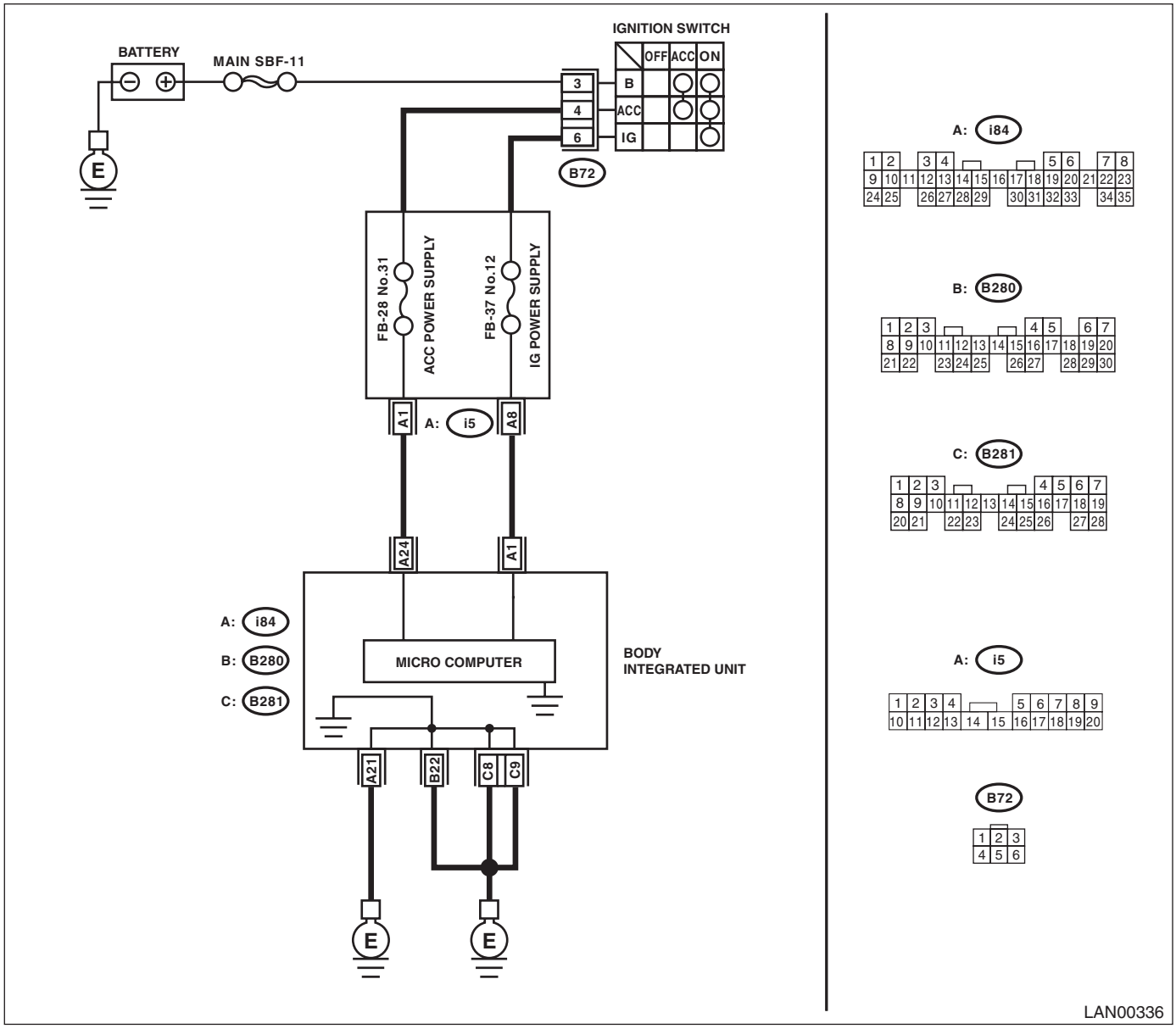
NOTE:
When some B1101 BATT p/supply (control) malfunction cont. are output at the same time, all function of body integrated unit may not function.
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1102 current malfunction?	Go to step **2**.	Go to step **5**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit and reconnect. 3) Wait approx. 2 minutes. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1102 current malfunction?	Go to step **3**.	Go to step **5**.
3	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Inspect the fuse.	Is the fuse OK?	Go to step **4**.	Replace the defective fuse.
4	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B281). 2) Measure the voltage between body integrated unit connector and chassis ground using tester. ***Connector & terminal*** ***(B281) No. 2 (+) — Chassis ground (–):***	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Repair or replace the open or shorted circuit between body integrated unit and fuse.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B280).	Is there poor contact in connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

E: DTC B1103 IGNITION POWER FAILURE

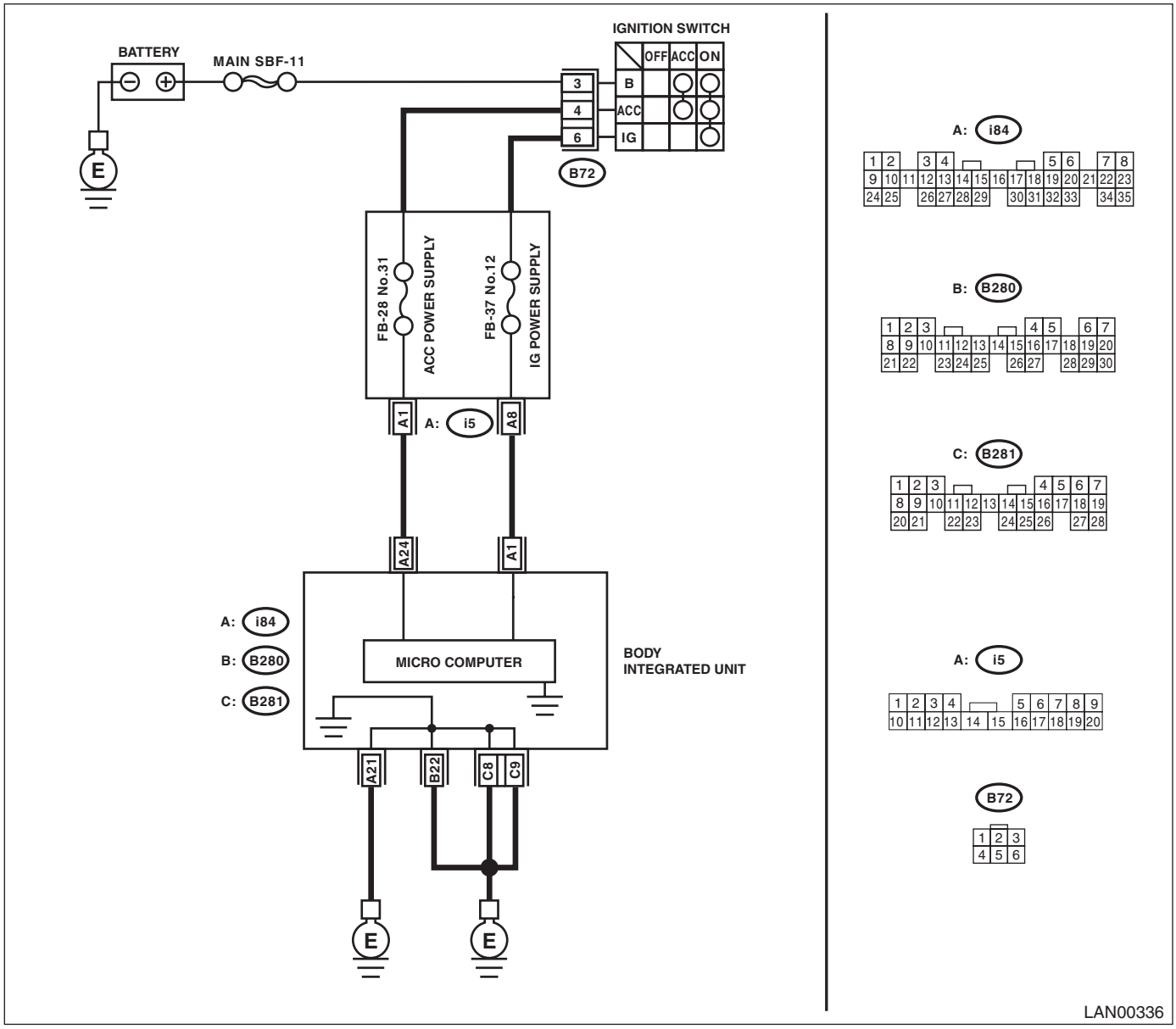
DTC DETECTING CONDITION:
IGN power supply circuit input voltage is too high or too low.
TROUBLE SYMPTOM:
Error related to LAN system will not be detected.
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1103 current malfunction?	Go to step **2**.	Go to step **5**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit and reconnect. 3) Turn the ignition switch to ON. 4) Wait approx. 2 minutes. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1103 current malfunction?	Go to step **3**.	Go to step **5**.
3	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Inspect the fuse.	Is the fuse OK?	Go to step **4**.	Replace the defective fuse.
4	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the voltage between body integrated unit connector and chassis ground using tester. ***Connector & terminal*** ***(B280) No. 1 (+) — Chassis ground (–):***	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Repair or replace the open or shorted circuit between body integrated unit and fuse.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B280).	Is there poor contact in connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

F: DTC B1104 ACC POWER FAILURE

DTC DETECTING CONDITION:
ACC power supply circuit input voltage is too high or too low.
TROUBLE SYMPTOM:
Rear wiper may not operate at ACC position.
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1104 current malfunction?	Go to step **2**.	Go to step **5**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit and reconnect. 3) Turn the ignition switch to ACC. 4) Wait approx. 2 minutes. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1104 current malfunction?	Go to step **3**.	Go to step **5**.
3	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Inspect the fuse.	Is the fuse OK?	Go to step **4**.	Replace the defective fuse.
4	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (i84). 2) Measure the voltage between body integrated unit connector and chassis ground using tester. ***Connector & terminal*** ***(i84) No. 24 (+) — Chassis ground (–):***	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Repair or replace the open or shorted circuit between body integrated unit and fuse.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B280).	Is there poor contact in connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

G: DTC B1105 KEY INTERLOCK CIRCUIT ABNORMAL

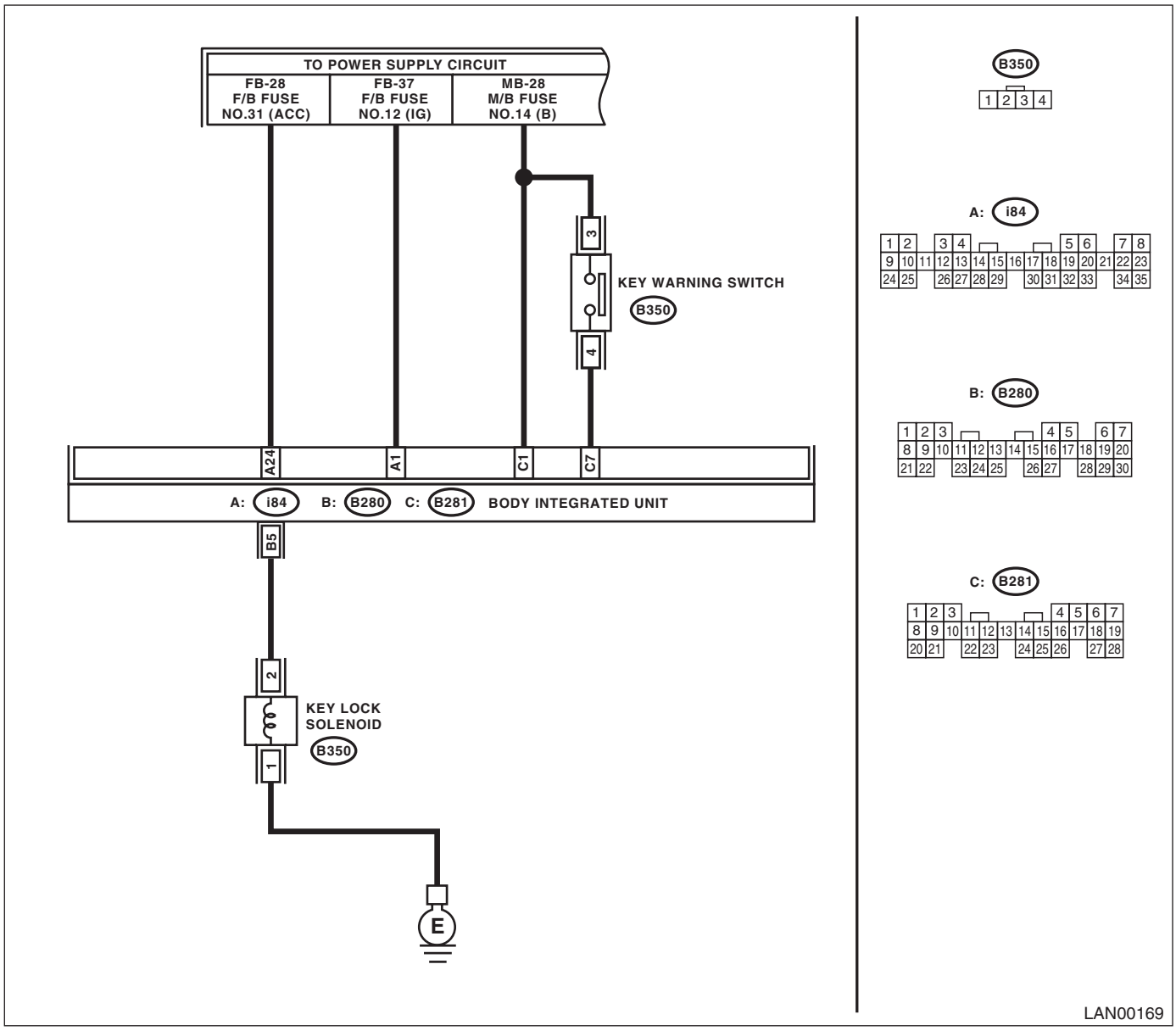
DTC DETECTING CONDITION:

Key interlock circuit is shorted to ground.

TROUBLE SYMPTOM:

- There is no key interlock power supply.
- Key interlock does not release or does not keep lock condition.

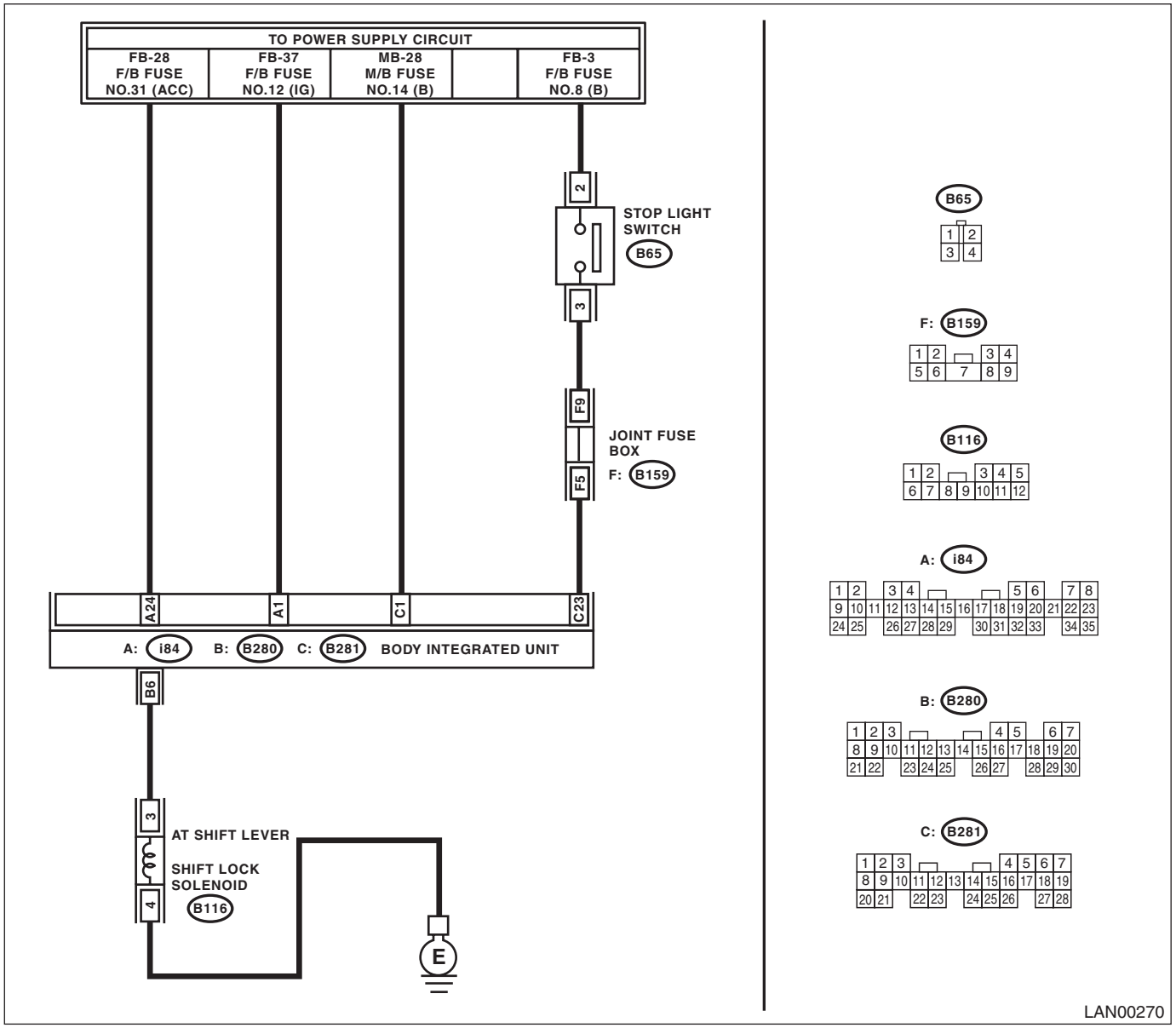
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** 1) Insert the ignition key. 2) Shift to the Neutral range. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1105 current malfunction?	Go to step **2**.	Go to step **8**.
2	**CHECK DTC.** 1) Remove the ignition key. 2) Disconnect the key lock solenoid connector (B350) and body integrated unit connector (B280). 3) Connect the disconnected connectors. 4) Insert the key and shift into Neutral. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1105 current malfunction?	Go to step **3**.	Go to step **8**.
3	**CHECK KEY LOCK SOLENOID.** 1) Disconnect the key lock solenoid connector (B350). 2) Measure the resistance between the key lock solenoid connector. ***Connector & terminal*** ***(B350) No. 1 — No. 2:***	Is the resistance between 12 — 14.5 Ω?	Go to step **4**.	Replace the key lock solenoid.
4	**CHECK KEY LOCK SOLENOID.** 1) Turn the ignition switch to OFF. 2) Disconnect the key lock solenoid connector. 3) Connect the battery terminal to key lock solenoid. ***Terminals*** ***(B350) No. 2 — positive terminal:*** ***(B350) No. 1 — ground terminal:***	Is the solenoid activated and then key locked?	Go to step **5**.	Replace the key lock solenoid.
5	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between body integrated unit and key lock solenoid using tester. ***Connector & terminal*** ***(B350) No. 2 — (B280) No. 5:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK HARNESS.** Measure the resistance between body integrated unit and chassis ground using tester. ***Connector & terminal*** ***(B280) No. 5 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair or replace the short circuit of the harness.
7	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Measure the voltage between body integrated unit and chassis ground using tester. ***Connector & terminal*** ***(B280) No. 5 (+) — Chassis ground (–):***	Is the voltage 1.5 V or more?	Repair or replace the short circuit of the harness.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
8	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B280) 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.

H: DTC B1106 SHIFT LOCK CIRCUIT FAILURE

DTC DETECTING CONDITION:
Shift lock circuit is shorted to ground.
TROUBLE SYMPTOM:
Shift lock does not be released or remain locked.
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** 1) Turn the ignition switch to ON. 2) Keep the Parking range for approx. 5 seconds. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step **2**.	Go to step **7**.
2	**CHECK DTC.** 1) Disconnect the body integrated unit connector (B280) and shift lock solenoid connector (B116). 2) Connect the disconnected connectors. 3) Turn the ignition switch to ON, then keep the Parking range for approx. 5 seconds. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step **3**.	Repair or replace the open or short circuit of harness.
3	**CHECK HARNESS.** 1) Disconnect the shift lock solenoid connector (B116). 2) Measure the resistance between shift lock solenoid unit and chassis ground using tester. ***Connector & terminal*** ***(B116) No. 4 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **4**.	Replace the shift lock solenoid.
4	**CHECK SHIFT LOCK SOLENOID.** 1) Disconnect the shift lock solenoid connector. 2) Measure the resistance between the shift lock solenoid connector. ***Connector & terminal*** ***(B116) No. 4 — No. 3:***	Is the resistance between 19 — 25 Ω?	Go to step **5**.	Replace the shift lock solenoid.
5	**CHECK SHIFT LOCK SOLENOID.** 1) Turn the ignition switch to OFF. 2) Disconnect the shift lock solenoid connector. 3) Connect the battery terminal to shift lock solenoid. ***Terminals*** ***(B116) No. 3 — positive terminal:*** ***(B116) No. 4 — ground terminal:***	Is the solenoid activated, and then the shift lock released?	Go to step **6**.	Replace the shift lock solenoid.
6	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between body integrated unit connector (B280) and chassis ground. ***Connector & terminal*** ***(B280) No. 6 — Chassis ground:***	Is the resistance 1 MΩ or more?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Repair the short circuit of harness or replace harness.
7	**CHECK DTC.** 1) Turn the ignition switch to ON. 2) With Parking range, depress the brake pedal and keep it at depressed condition. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step **8**.	Go to step **9**.

	Step	Check	Yes	No
8	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B280) and shift lock solenoid connector (B116). 3) Connect the disconnected connectors. 4) Turn the ignition switch to ON. 5) Shift into Parking range, then depress the brake pedal. 6) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step **4**.	Go to step **9**.
9	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector (B280) and shift lock solenoid connector (B116).	Is there poor contact in connector terminal?	Repair the poor contact of the terminal or replace the harness.	It is possible that temporary poor contact occurs.

I: DTC U1201 CAN-HS COUNTER ABNORMAL

DTC DETECTING CONDITION:

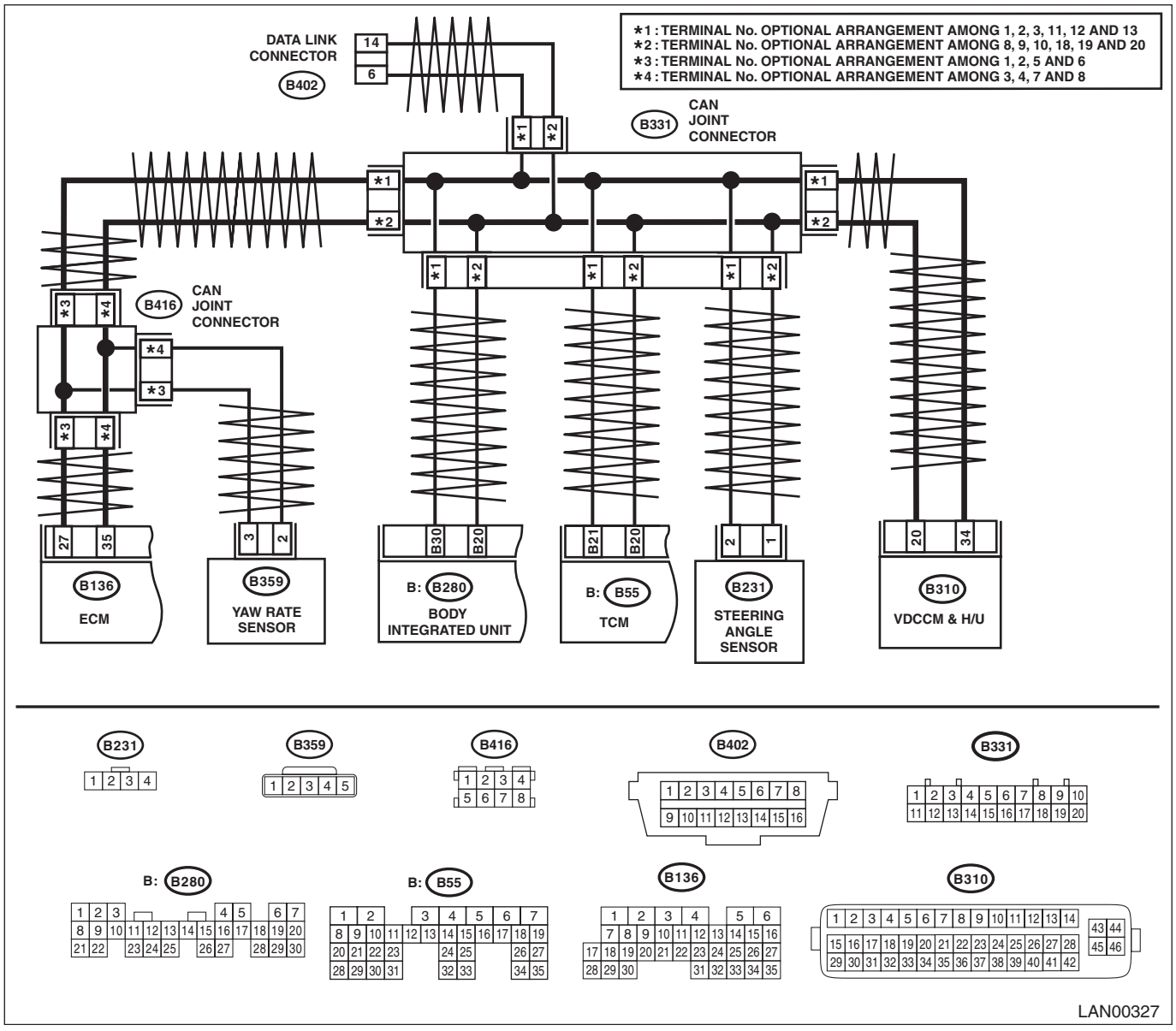
High speed CAN communication becomes unstable.

TROUBLE SYMPTOM:

- "Er HC" is displayed in odo/trip meter.
- Malfunction indicator light illuminates.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

WIRING DIAGRAM:

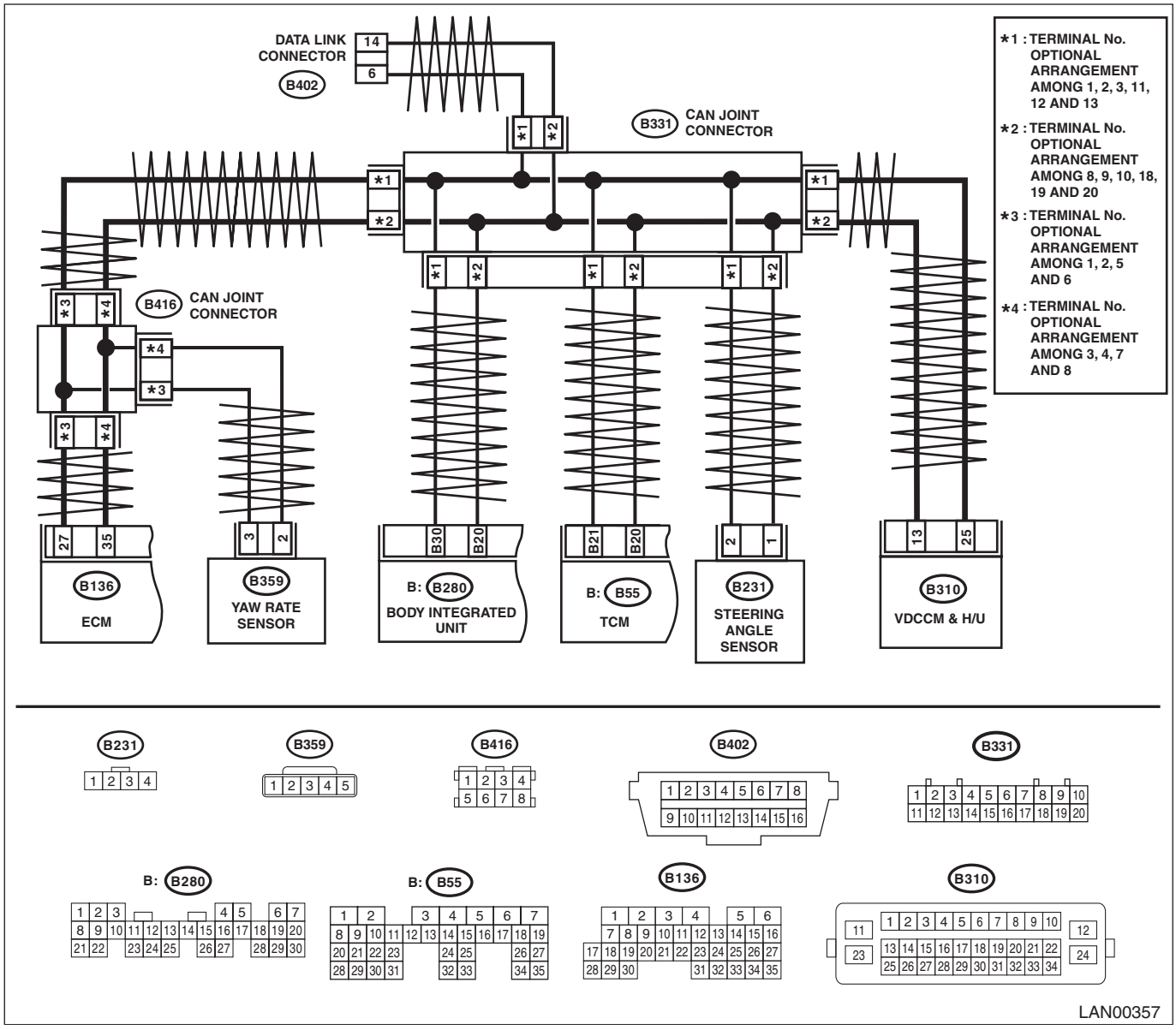


	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Is there DTC U1202?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1201 a current malfunction?	Go to step **3**.	Go to step **14**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect all the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **4**.	Go to step **14**.
4	**CHECK TCM.** 1) Turn the ignition switch to OFF. 2) Disconnect the TCM connector (B55). 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **5**.	Go to step **16**.
5	**CHECK STEERING ANGLE SENSOR.** 1) Turn the ignition switch to OFF. 2) Connect the TCM connector. 3) Disconnect the steering angle sensor connector (B231). 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **6**.	Go to step **17**.
6	**CHECK YAW RATE SENSOR.** 1) Turn the ignition switch to OFF. 2) Connect the steering angle sensor connector. 3) Disconnect the yaw rate sensor connector (B359). 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **7**.	Go to step **18**.
7	**CHECK HARNESS VDC CM.** 1) Turn the ignition switch to OFF. 2) Connect the yaw rate sensor connector. 3) Disconnect the VDCCM connector (B310). 4) Install the 120 Ω resistance to VDCCM connector terminals. ***Terminals*** ***(B310) No. 20 — No. 34:*** 5) Using the tester, measure the resistance between terminals of data link connector. ***Terminals*** ***(B402) No. 6 — No. 14:***	Is the resistance 60 Ω?	Go to step **8**.	Go to step **10**.
8	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **16**.	Go to step **9**.
9	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1202 a current malfunction?	Replace the VDCCM. <Ref. to VDC-10, REMOVAL, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step **10**.

	Step	Check	Yes	No
10	**CHECK ECM.** 1) Turn the ignition switch to OFF. 2) Connect the VDCCM. 3) Disconnect the ECM connector (B136). 4) Install the 120 Ω resistance to ECM connector. ***Terminals*** ***(B136) No. 27 — No. 35:*** 5) Using the tester, measure the resistance between terminals of data link connector. ***Connector & terminal*** ***(B402) No. 6 — No. 14:***	Is the resistance 60 Ω?	Go to step **11**.	Repair or replace the open circuit of harness.
11	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **12**.	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>
12	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1202 a current malfunction?	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>	Go to step **13**.
13	**CHECK DTC.** 1) Reconnect all the disconnected connectors. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>	Go to step **14**.
14	**CHECK HARNESS.** 1) Shake the instrument harness and bulkhead harness, rear harness. 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	**CHECK CONNECTOR.** 1) Disconnect the connector used for CAN circuit. 2) Check the connector terminal.	Is there poor contact in connector terminal?	Repair the connector terminal where poor contact exists, or replace harness.	Temporary poor contact occurs.
16	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of data link connector and TCM. ***Connector & terminal*** ***(B402) No. 14 — (B55) No. 20:*** ***(B402) No. 6 — (B55) No. 21:***	Is the resistance less than 10 Ω?	Go to step **17**.	Repair or replace the harness.
17	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of data link connector and steering angle sensor. ***Connector & terminal*** ***(B402) No. 14 — (B231) No. 1:*** ***(B402) No. 6 — (B231) No. 2:***	Is the resistance less than 10 Ω?	Go to step **18**.	Repair or replace the harness.
18	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of data link connector and yaw rate sensor. ***Connector & terminal*** ***(B402) No. 14 — (B359) No. 2:*** ***(B402) No. 6 — (B359) No. 3:***	Is the resistance less than 10 Ω?	Replace the yaw rate sensor.	Repair or replace the harness.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Is there DTC U1202?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1201 a current malfunction?	Go to step **3**.	Go to step **14**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect all the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **4**.	Go to step **14**.
4	**CHECK TCM.** 1) Turn the ignition switch to OFF. 2) Disconnect the TCM connector (B55). 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **5**.	Go to step **16**.
5	**CHECK STEERING ANGLE SENSOR.** 1) Turn the ignition switch to OFF. 2) Connect the TCM connector. 3) Disconnect the steering angle sensor connector (B231). 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **6**.	Go to step **17**.
6	**CHECK YAW RATE SENSOR.** 1) Turn the ignition switch to OFF. 2) Connect the steering angle sensor connector. 3) Disconnect the yaw rate sensor connector (B359). 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **7**.	Go to step **18**.
7	**CHECK HARNESS VDC CM.** 1) Turn the ignition switch to OFF. 2) Connect the yaw rate sensor connector. 3) Disconnect the VDCCM connector (B310). 4) Install the 120 Ω resistance to VDCCM connector terminals. ***Terminals*** ***(B310) No. 13 — No. 25:*** 5) Using the tester, measure the resistance between terminals of data link connector. ***Terminals*** ***(B402) No. 6 — No. 14:***	Is the resistance 60 Ω?	Go to step **8**.	Go to step **10**.
8	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **16**.	Go to step **9**.
9	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1202 a current malfunction?	Replace the VDCCM. <Ref. to VDC-10, REMOVAL, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step **10**.

	Step	Check	Yes	No
10	**CHECK ECM.** 1) Turn the ignition switch to OFF. 2) Connect the VDCCM. 3) Disconnect the ECM connector (B136). 4) Install the 120 Ω resistance to ECM connector. ***Terminals*** ***(B136) No. 27 — No. 35:*** 5) Using the tester, measure the resistance between terminals of data link connector. ***Connector & terminal*** ***(B402) No. 6 — No. 14:***	Is the resistance 60 Ω?	Go to step **11**.	Repair or replace the open circuit of harness.
11	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Go to step **12**.	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>
12	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1202 a current malfunction?	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>	Go to step **13**.
13	**CHECK DTC.** 1) Reconnect all the disconnected connectors. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1201 a current malfunction?	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>	Go to step **14**.
14	**CHECK HARNESS.** 1) Shake the instrument harness and bulkhead harness, rear harness. 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	**CHECK CONNECTOR.** 1) Disconnect the connector used for CAN circuit. 2) Check the connector terminal.	Is there poor contact in connector terminal?	Repair the connector terminal where poor contact exists, or replace harness.	Temporary poor contact occurs.
16	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of data link connector and TCM. ***Connector & terminal*** ***(B402) No. 14 — (B55) No. 20:*** ***(B402) No. 6 — (B55) No. 21:***	Is the resistance less than 10 Ω?	Go to step **17**.	Repair or replace the harness.
17	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of data link connector and steering angle sensor. ***Connector & terminal*** ***(B402) No. 14 — (B231) No. 1:*** ***(B402) No. 6 — (B231) No. 2:***	Is the resistance less than 10 Ω?	Go to step **18**.	Repair or replace the harness.
18	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of data link connector and yaw rate sensor. ***Connector & terminal*** ***(B402) No. 14 — (B359) No. 2:*** ***(B402) No. 6 — (B359) No. 3:***	Is the resistance less than 10 Ω?	Replace the yaw rate sensor.	Repair or replace the harness.

J: DTC U1202 CAN-HS BUS OFF

DTC DETECTING CONDITION:

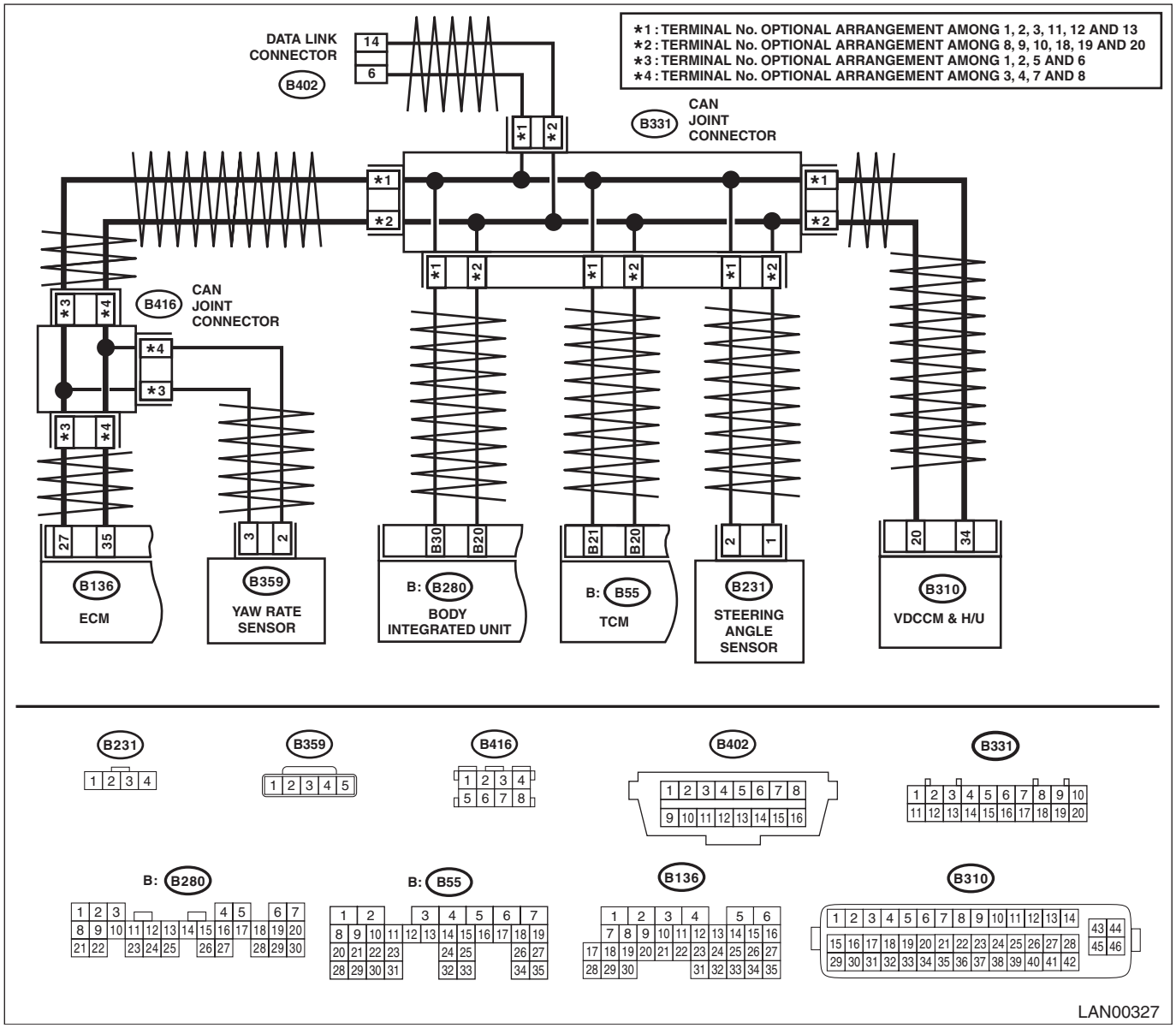
- Open or power supply-output short, GND-output short occurs in CAN line.
- End resistance malfunction
- Internal error in each control module

TROUBLE SYMPTOM:

"Er HC" is displayed in odo/trip meter.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

WIRING DIAGRAM:

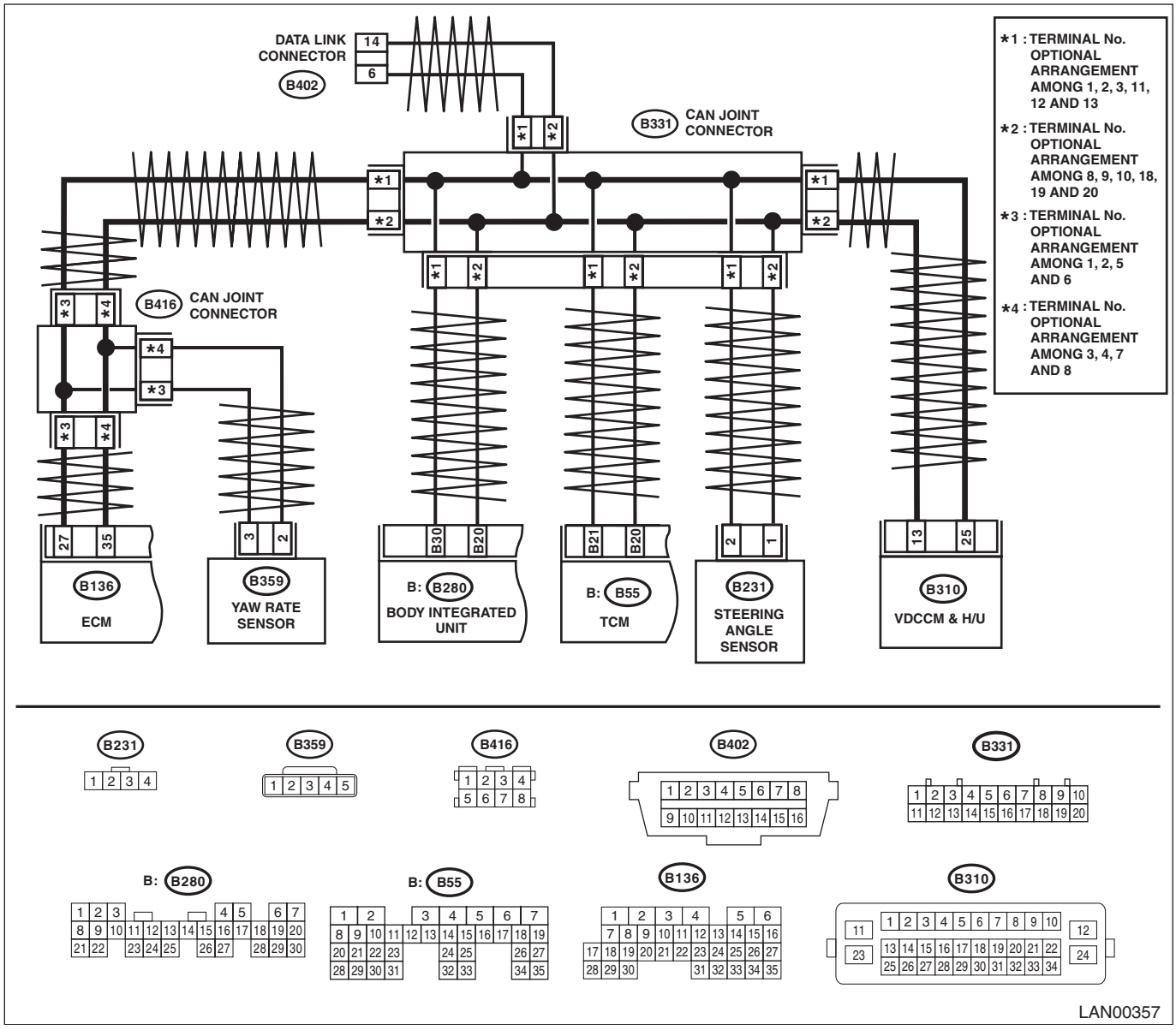


	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, confirm all DTCs.	Is any DTC other than for the body integrated unit displayed?	Perform the diagnosis according to displayed DTC.	Go to step **2**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1202 a current malfunction?	Go to step **3**.	Go to step **10**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) 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	**CHECK HARNESS.** 1) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 6 — (B136) No. 27:*** ***(B402) No. 6 — (B310) No. 34:*** ***(B402) No. 6 — (B359) No. 3:*** ***(B402) No. 6 — (B231) No. 2:*** ***(B402) No. 6 — (B55) No. 21:*** ***(B402) No. 6 — (B280) No. 3:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 14 — (B136) No. 35:*** ***(B402) No. 14 — (B310) No. 20:*** ***(B402) No. 14 — (B359) No. 2:*** ***(B402) No. 14 — (B231) No. 1:*** ***(B402) No. 14 — (B55) No. 20:*** ***(B402) No. 14 — (B280) No. 9:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK ECM.** 1) Connect the ECM. 2) Using the tester, measure the resistance between terminals of data link connector. ***Connector & terminal*** ***(B402) No. 6 — No. 14:***	Is the resistance 120±5 Ω?	Go to step **7**.	Inspect the ECM. <Ref. to EN(H6DO)(diag)-34, HOW TO USE THE SUBARU SELECT MONITOR, OPERATION, Subaru Select Monitor.>
7	**CHECK VDC/ABS CM.** 1) Disconnect the ECM connector (B136). 2) Connect the VDC/ABS CM. 3) Using the tester, measure the resistance between terminals of data link connector. ***Connector & terminal*** ***(B402) No. 6 — No. 14:***	Is the resistance 120±5 Ω?	Go to step **8**.	Replace the VDC/ABS CM.

	Step	Check	Yes	No
8	**CHECK HARNESS.** 1) Connect the disconnected connectors. 2) Using the tester, measure the resistance between terminals of data link connector and chassis ground. ***Connector & terminal*** ***(B402) No. 6 — Chassis ground:*** ***(B402) No. 14 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **9**.	Go to step **12**.
9	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Using the tester, measure the voltage between terminals of data link connector and chassis ground. ***Connector & terminal*** ***(B402) No. 6 — Chassis ground:*** ***(B402) No. 14 — Chassis ground:***	Is the voltage 6 V or more?	Go to step **13**.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
10	**CHECK HARNESS.** 1) Shake the harness. 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	**CHECK CONNECTOR.** Disconnect the connector used for high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	It is possible that temporary poor contact occurs.
12	**CHECK CONTROL MODULE.** 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	**CHECK ECM.** 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.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, confirm all DTCs.	Is any DTC other than for the body integrated unit displayed?	Perform the diagnosis according to displayed DTC.	Go to step **2**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 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**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) 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	**CHECK HARNESS.** 1) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 6 — (B136) No. 27:*** ***(B402) No. 6 — (B310) No. 25:*** ***(B402) No. 6 — (B359) No. 3:*** ***(B402) No. 6 — (B231) No. 2:*** ***(B402) No. 6 — (B55) No. 21:*** ***(B402) No. 6 — (B280) No. 3:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of harness.
5	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 14 — (B136) No. 35:*** ***(B402) No. 14 — (B310) No. 13:*** ***(B402) No. 14 — (B359) No. 2:*** ***(B402) No. 14 — (B231) No. 1:*** ***(B402) No. 14 — (B55) No. 20:*** ***(B402) No. 14 — (B280) No. 9:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the open circuit of harness.
6	**CHECK ECM.** 1) Connect the ECM. 2) Using the tester, measure the resistance between terminals of data link connector. ***Connector & terminal*** ***(B402) No. 6 — No. 14:***	Is the resistance 120±5 Ω?	Go to step **7**.	Inspect the ECM. <Ref. to EN(H6DO)(diag)-34, HOW TO USE THE SUBARU SELECT MONITOR, OPERATION, Subaru Select Monitor.>
7	**CHECK VDC/ABS CM.** 1) Disconnect the ECM connector (B136). 2) Connect the VDC/ABS CM. 3) Using the tester, measure the resistance between terminals of data link connector. ***Connector & terminal*** ***(B402) No. 6 — No. 14:***	Is the resistance 120±5 Ω?	Go to step **8**.	Replace the VDC/ABS CM.

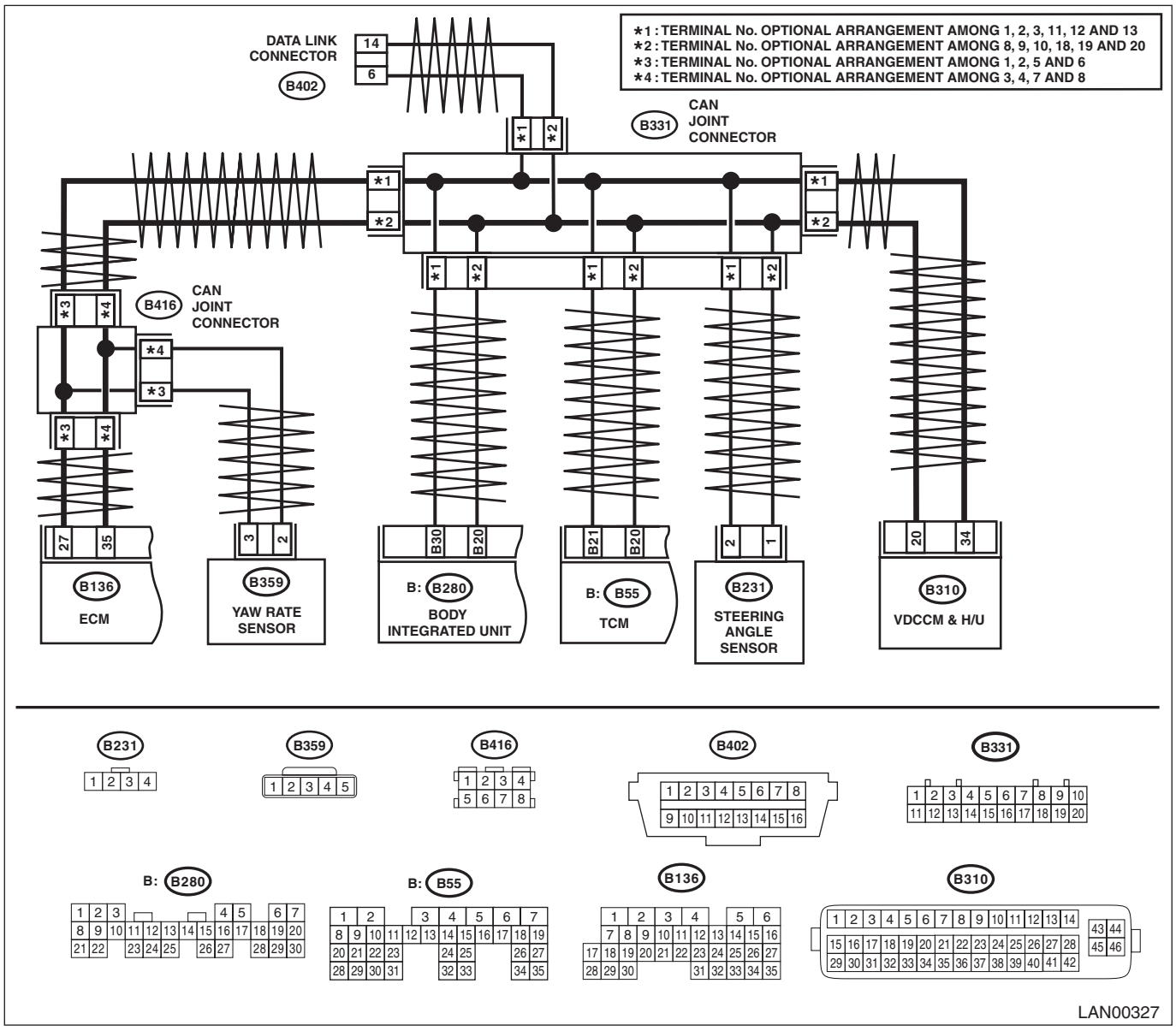
	Step	Check	Yes	No
8	**CHECK HARNESS.** 1) Connect the disconnected connectors. 2) Using the tester, measure the resistance between terminals of data link connector and chassis ground. ***Connector & terminal*** ***(B402) No. 6 — Chassis ground:*** ***(B402) No. 14 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **9**.	Go to step **12**.
9	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Using the tester, measure the voltage between terminals of data link connector and chassis ground. ***Connector & terminal*** ***(B402) No. 6 — Chassis ground:*** ***(B402) No. 14 — Chassis ground:***	Is the voltage 6 V or more?	Go to step **13**.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
10	**CHECK HARNESS.** 1) Shake the harness. 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	**CHECK CONNECTOR.** Disconnect the connector used for high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	It is possible that temporary poor contact occurs.
12	**CHECK CONTROL MODULE.** 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	**CHECK ECM.** 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.

K: DTC U1211 CAN-HS ECM DATA ABNORMAL

DTC DETECTING CONDITION:
Defective data from ECM.
TROUBLE SYMPTOM:
“Er HC” or “Er EG” is displayed in odo/trip meter.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

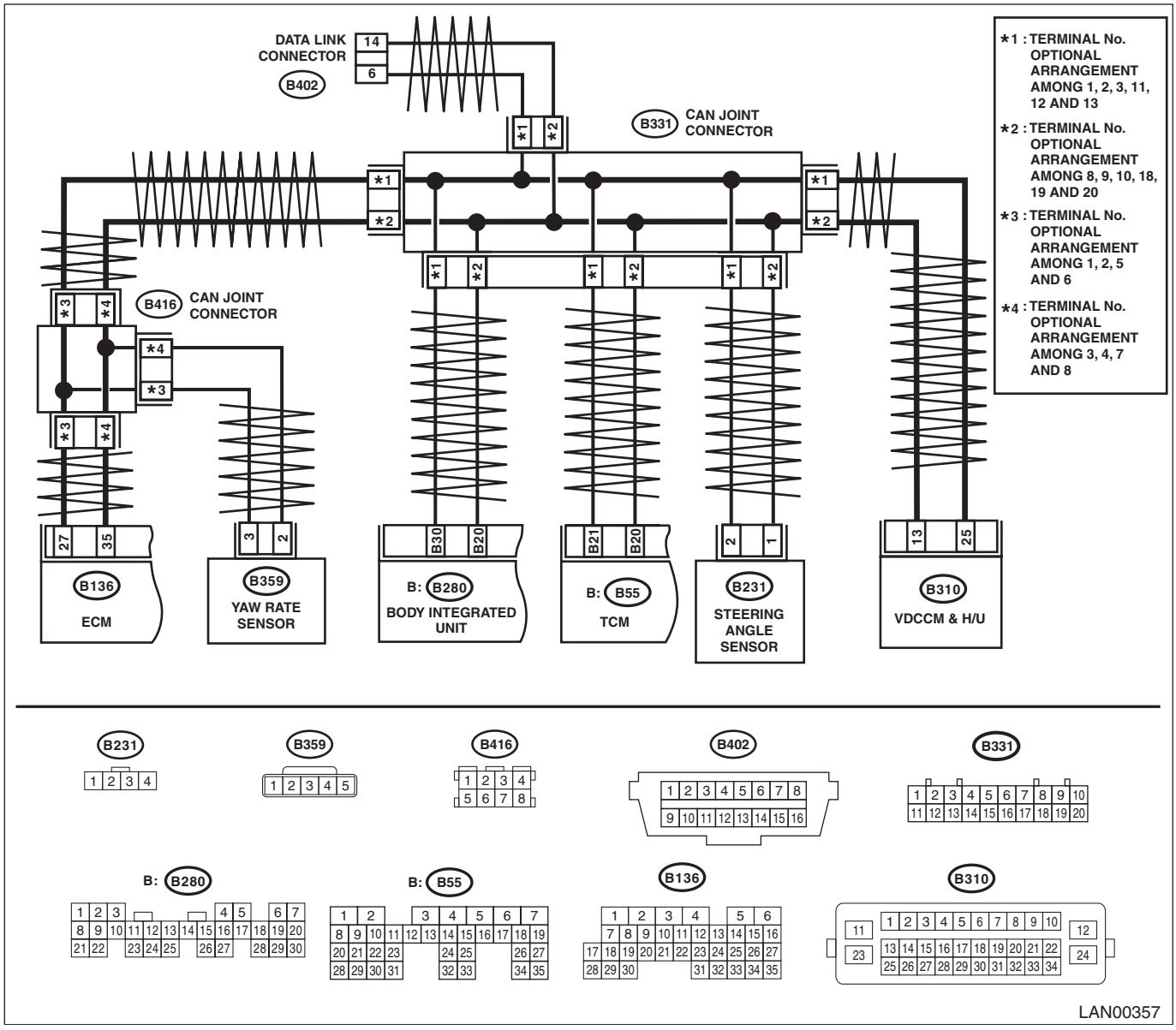
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1211 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from ECM. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1211 a current malfunction?	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>	Go to step **4**.
4	**CHECK HARNESS.** 1) Shake the harness used for CAN communication circuit. 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**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector that is connected to high speed CAN circuit.	Is there poor contact in connector?	Repair the connector terminal where poor contact exists, or replace harness.	It is possible that temporary poor contact occurs.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1211 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from ECM. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1211 a current malfunction?	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>	Go to step **4**.
4	**CHECK HARNESS.** 1) Shake the harness used for CAN communication circuit. 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**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector that is connected to high speed CAN circuit.	Is there poor contact in connector?	Repair the connector terminal where poor contact exists, or replace harness.	It is possible that temporary poor contact occurs.

L: DTC U1212 CAN-HS TCM DATA ABNORMAL

DTC DETECTING CONDITION:

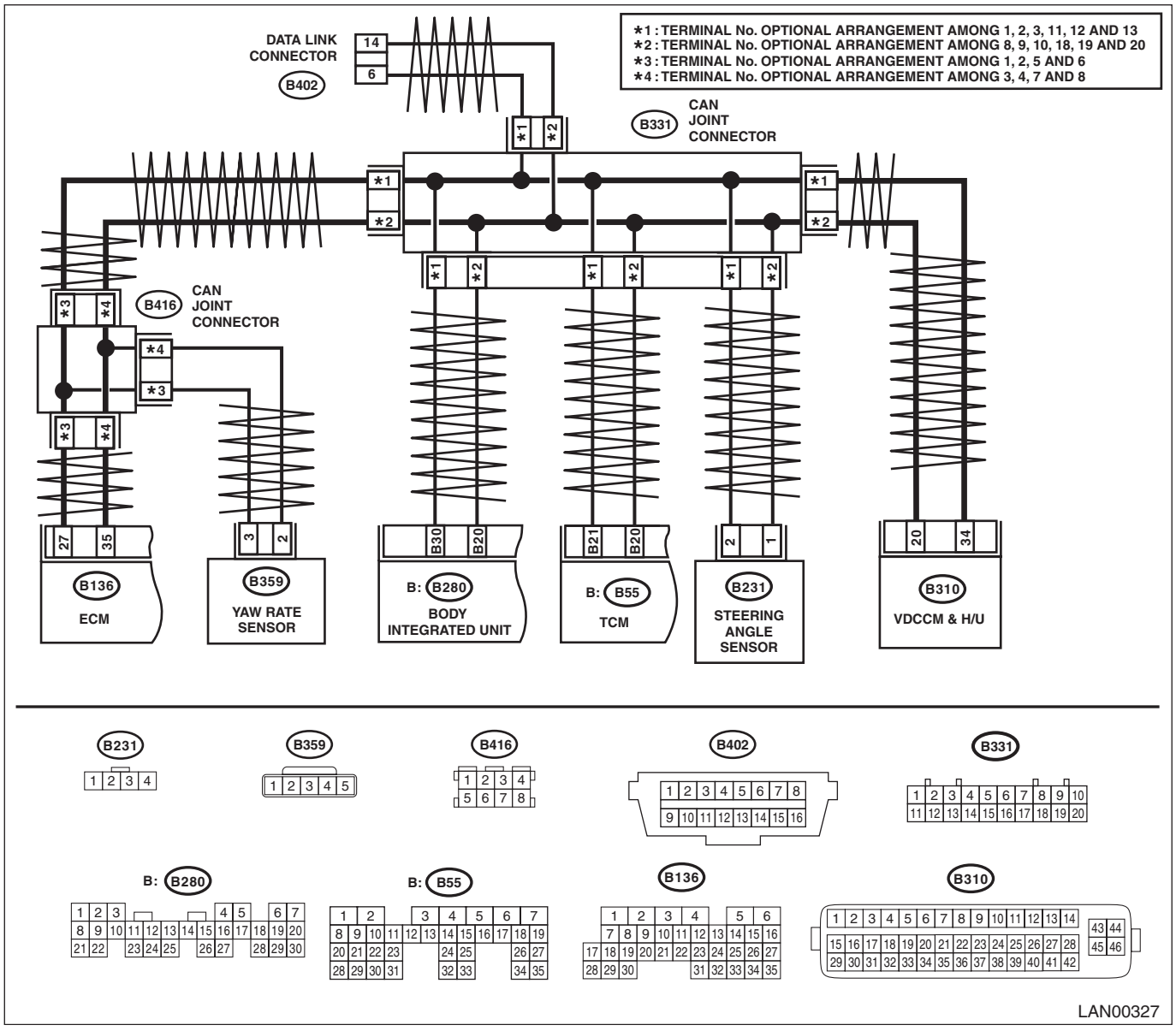
Malfunction of TCM itself or, defective data from TCM.

TROUBLE SYMPTOM:

- SPORT indicator light blinks.
- “Er HC” or “Er tC” is displayed in odo/trip meter.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

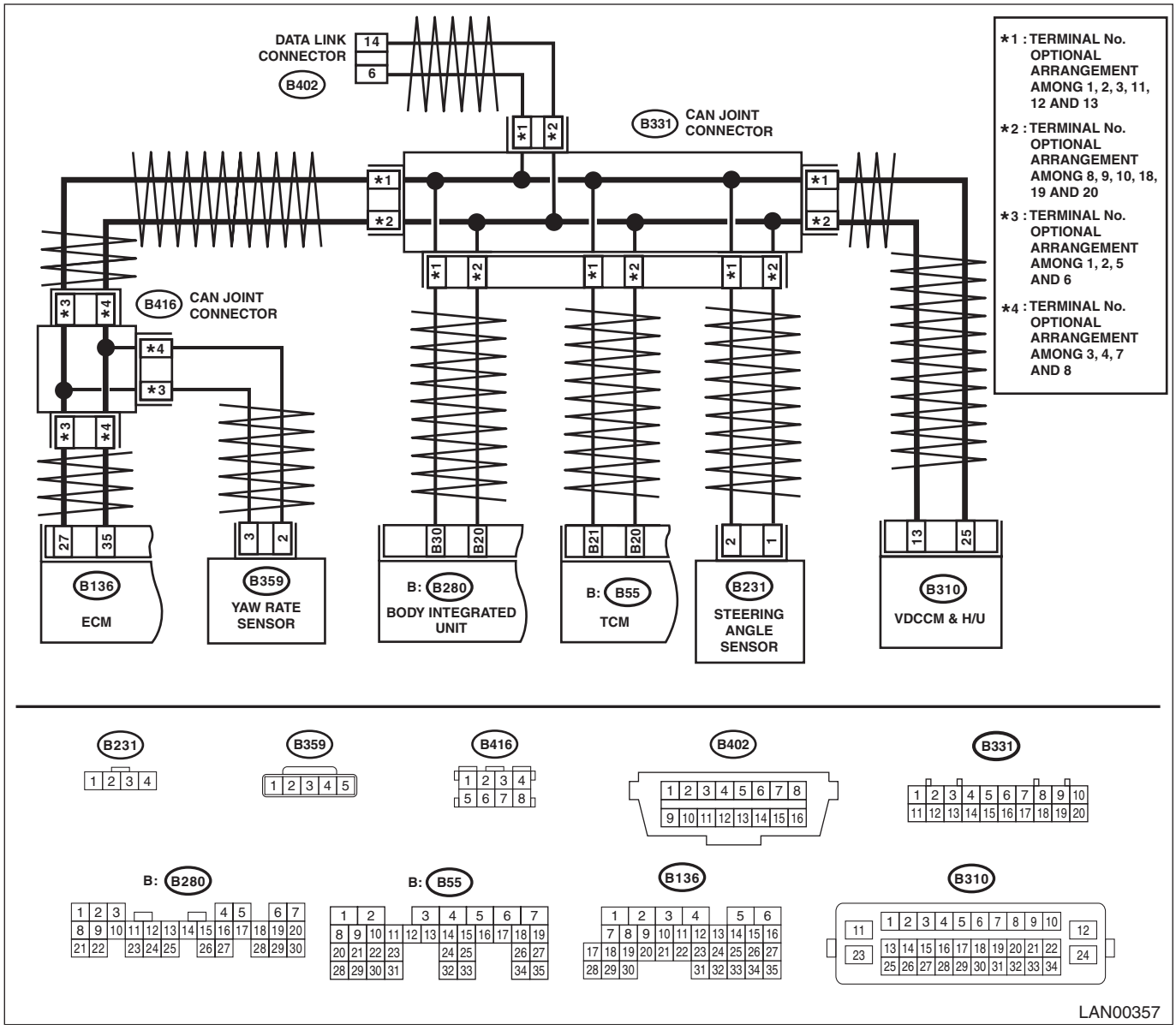
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1212 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from TCM. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1212 a current malfunction?	Replace the TCM. <Ref. to 5AT-60, Transmission Control Module (TCM).>	Go to step **4**.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) 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**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	Temporary poor contact occurs.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1212 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from TCM. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1212 a current malfunction?	Replace the TCM. <Ref. to 5AT-60, Transmission Control Module (TCM).>	Go to step **4**.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) 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**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	Temporary poor contact occurs.

M: DTC U1213 CAN-HS VDC/ABS DATA ABNORMAL

DTC DETECTING CONDITION:

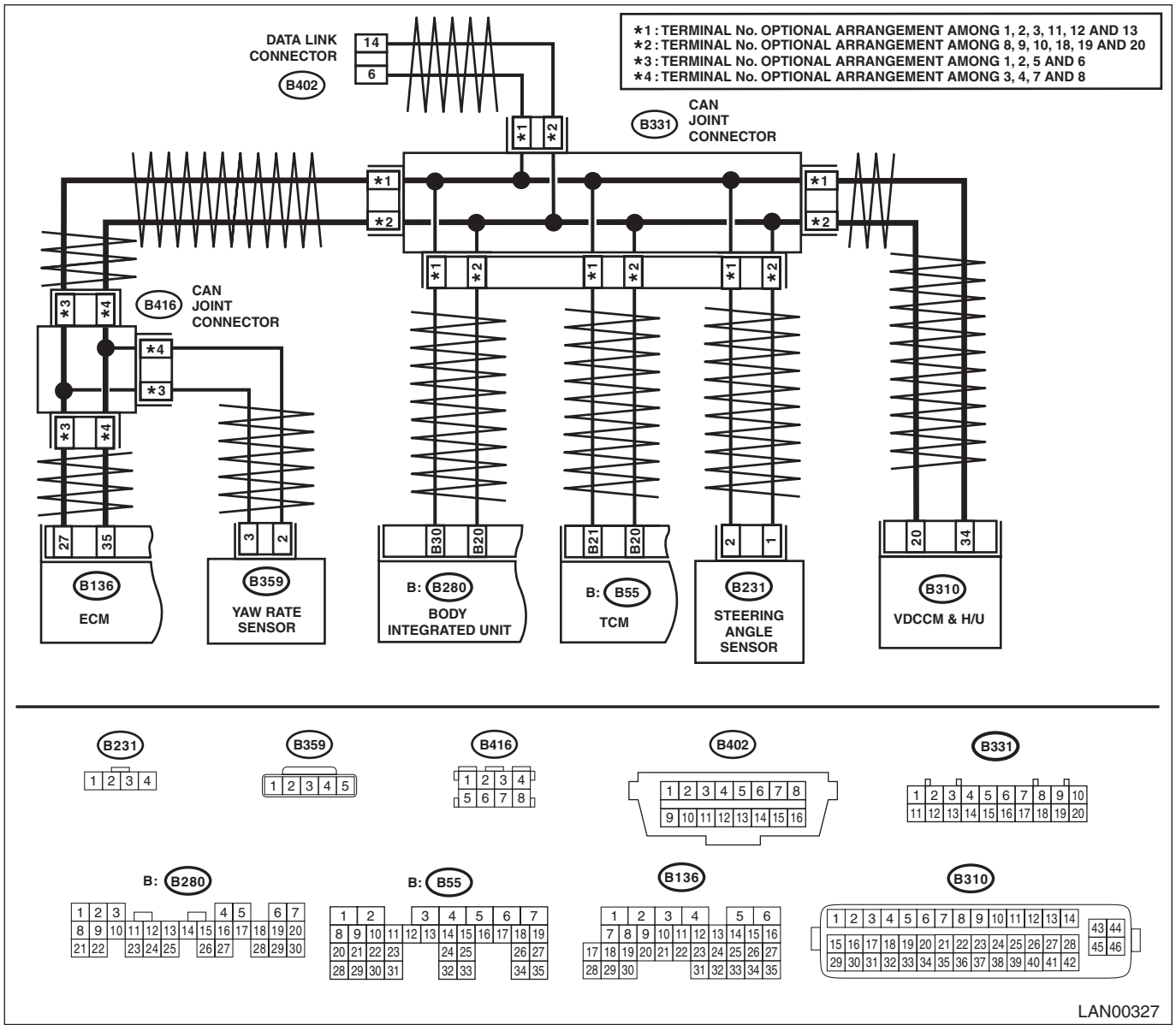
Malfunction of VDCCM itself or, defective data from VDCCM

TROUBLE SYMPTOM:

- ABS warning light and VDC warning light illuminate.
- “Er HC” or “Er Ab” is displayed in odo/trip meter.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

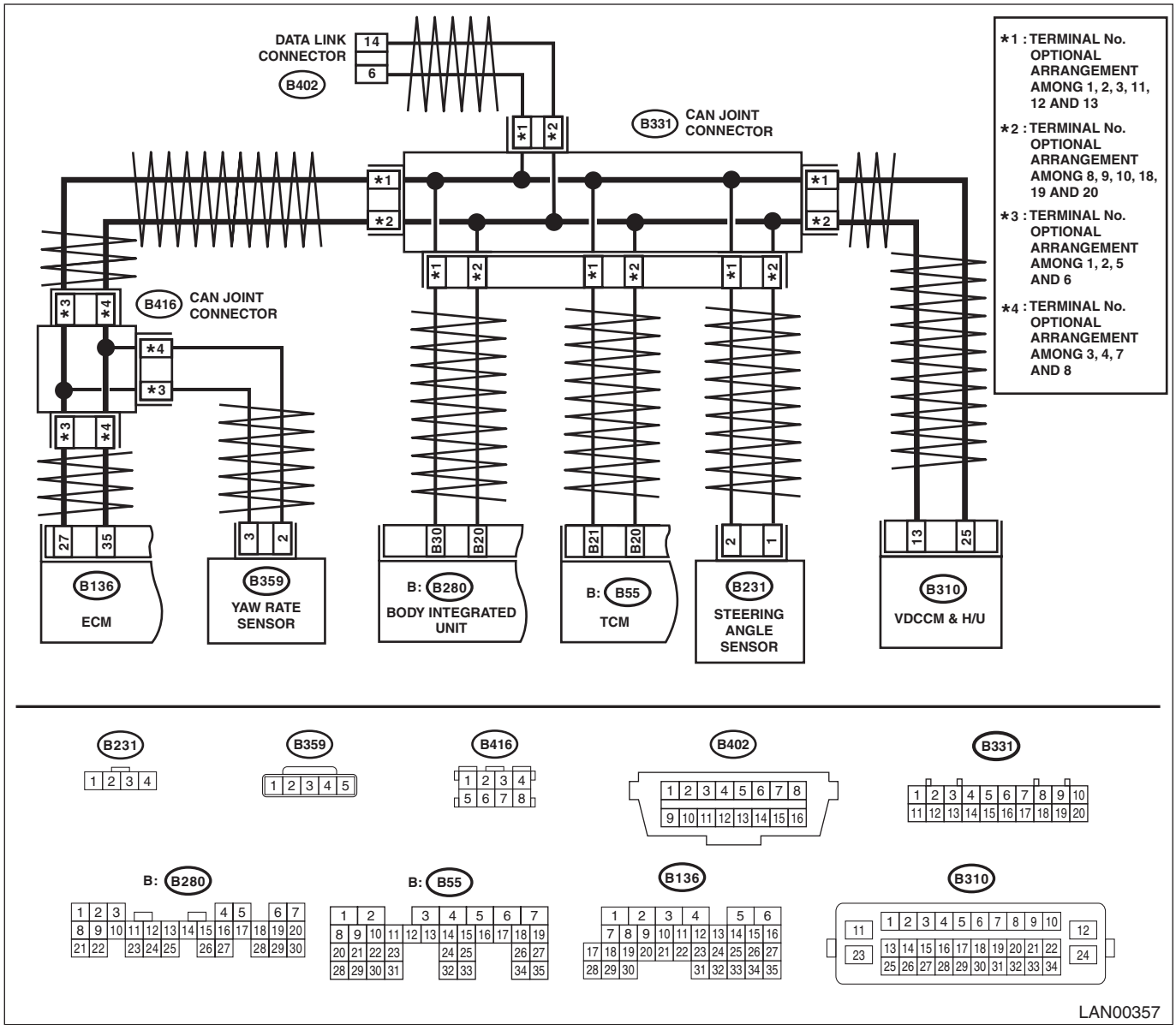
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1213 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the VDC/ABS CM connector. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1213 a current malfunction?	Replace the VDCCM. <Ref. to VDC-10, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step **4**.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) 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**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	It is possible that temporary poor contact occurs.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1213 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the VDC/ABS CM connector. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1213 a current malfunction?	Replace the VDCCM. <Ref. to VDC-10, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step **4**.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) 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**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	It is possible that temporary poor contact occurs.

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

DTC DETECTING CONDITION:

Not received error data from ECM. (If error is in the main harness, DTC P0600 CAN communication link is input simultaneously.)

NOTE:

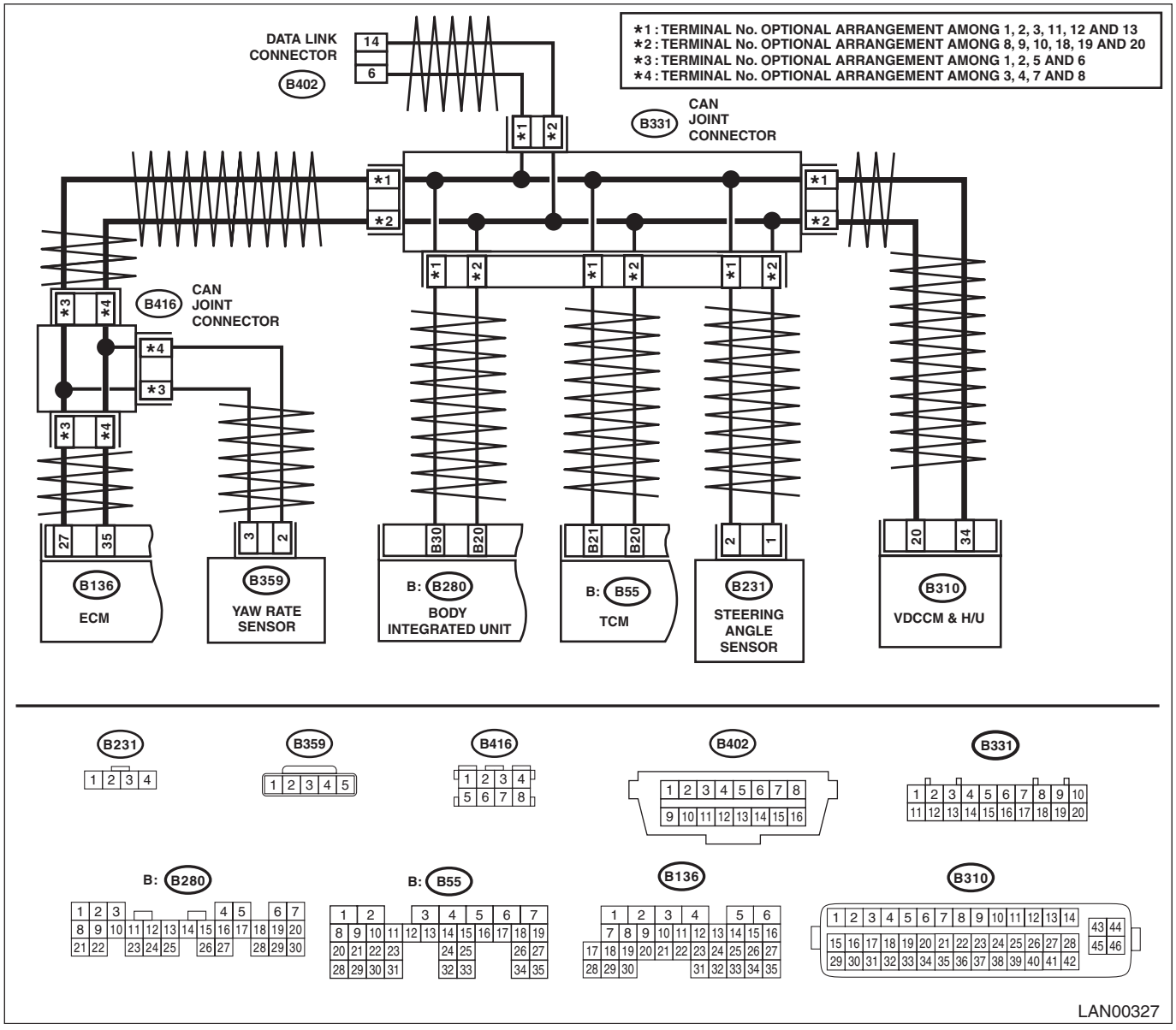
When more than two DTCs are displayed. <Ref. to LAN(diag)-30, DTC TABLE, LIST, List of Diagnostic Trouble Code (DTC).>

TROUBLE SYMPTOM:

- Malfunction indicator light illuminates.
- "Er HC" is displayed in odo/trip meter.
- P1718 (TCM) and C0057 (VDCCM) are output.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

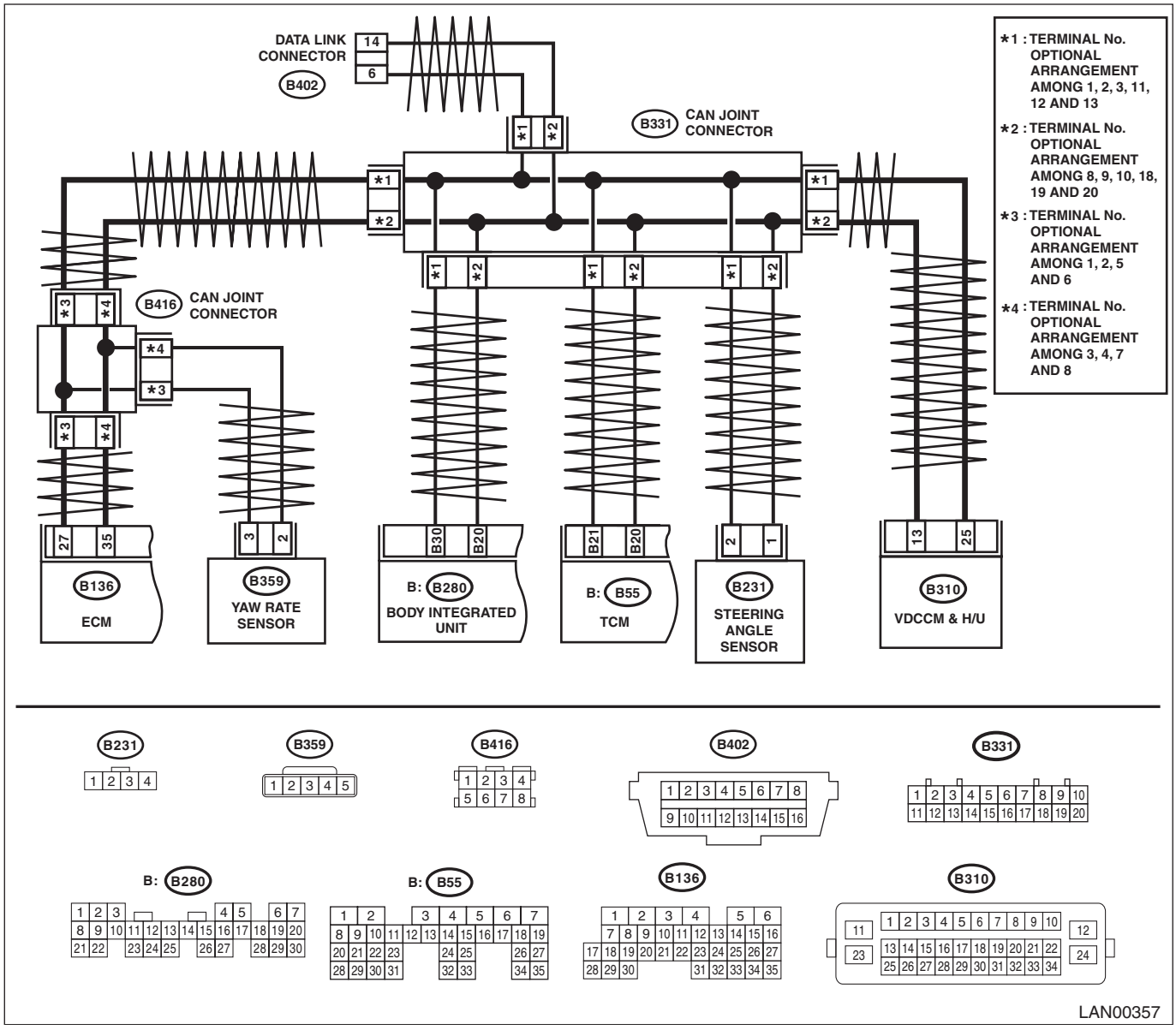
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1221 a current malfunction?	Go to step **3**.	Go to step **8**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) 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	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 6 — (B136) No. 27:*** ***(B402) No. 6 — (B310) No. 34:*** ***(B402) No. 6 — (B359) No. 3:*** ***(B402) No. 6 — (B231) No. 2:*** ***(B402) No. 6 — (B55) No. 21:*** ***(B402) No. 6 — (B280) No. 3:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of the harness.
5	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***VDC model:*** ***(B402) No. 14 — (B136) No. 35:*** ***(B402) No. 14 — (B310) No. 20:*** ***(B402) No. 14 — (B359) No. 2:*** ***(B402) No. 14 — (B231) No. 1:*** ***(B402) No. 14 — (B55) No. 20:*** ***(B402) No. 14 — (B280) No. 9:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the open circuit of the harness.
6	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Connect the disconnected connectors. 3) Start the engine and stop. 4) 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	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are DTCs P1718 or P0044, P0045 detected?	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
8	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) 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**.
9	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal where poor contact exists, or replace harness.	Temporary poor contact occurs.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1221 a current malfunction?	Go to step **3**.	Go to step **8**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) 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	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 6 — (B136) No. 27:*** ***(B402) No. 6 — (B310) No. 25:*** ***(B402) No. 6 — (B359) No. 3:*** ***(B402) No. 6 — (B231) No. 2:*** ***(B402) No. 6 — (B55) No. 21:*** ***(B402) No. 6 — (B280) No. 3:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the open circuit of the harness.
5	**CHECK HARNESS.** Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***VDC model:*** ***(B402) No. 14 — (B136) No. 35:*** ***(B402) No. 14 — (B310) No. 13:*** ***(B402) No. 14 — (B359) No. 2:*** ***(B402) No. 14 — (B231) No. 1:*** ***(B402) No. 14 — (B55) No. 20:*** ***(B402) No. 14 — (B280) No. 9:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the open circuit of the harness.
6	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Connect the disconnected connectors. 3) Start the engine and stop. 4) 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	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are DTCs P1718 or P0044, P0045 detected?	Replace the ECM. <Ref. to FU(H6DO)-37, Engine Control Module (ECM).>	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
8	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) 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**.
9	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal where poor contact exists, or replace harness.	Temporary poor contact occurs.

O: DTC U1222 CAN-HS TCM NO-RECEIVE DATA

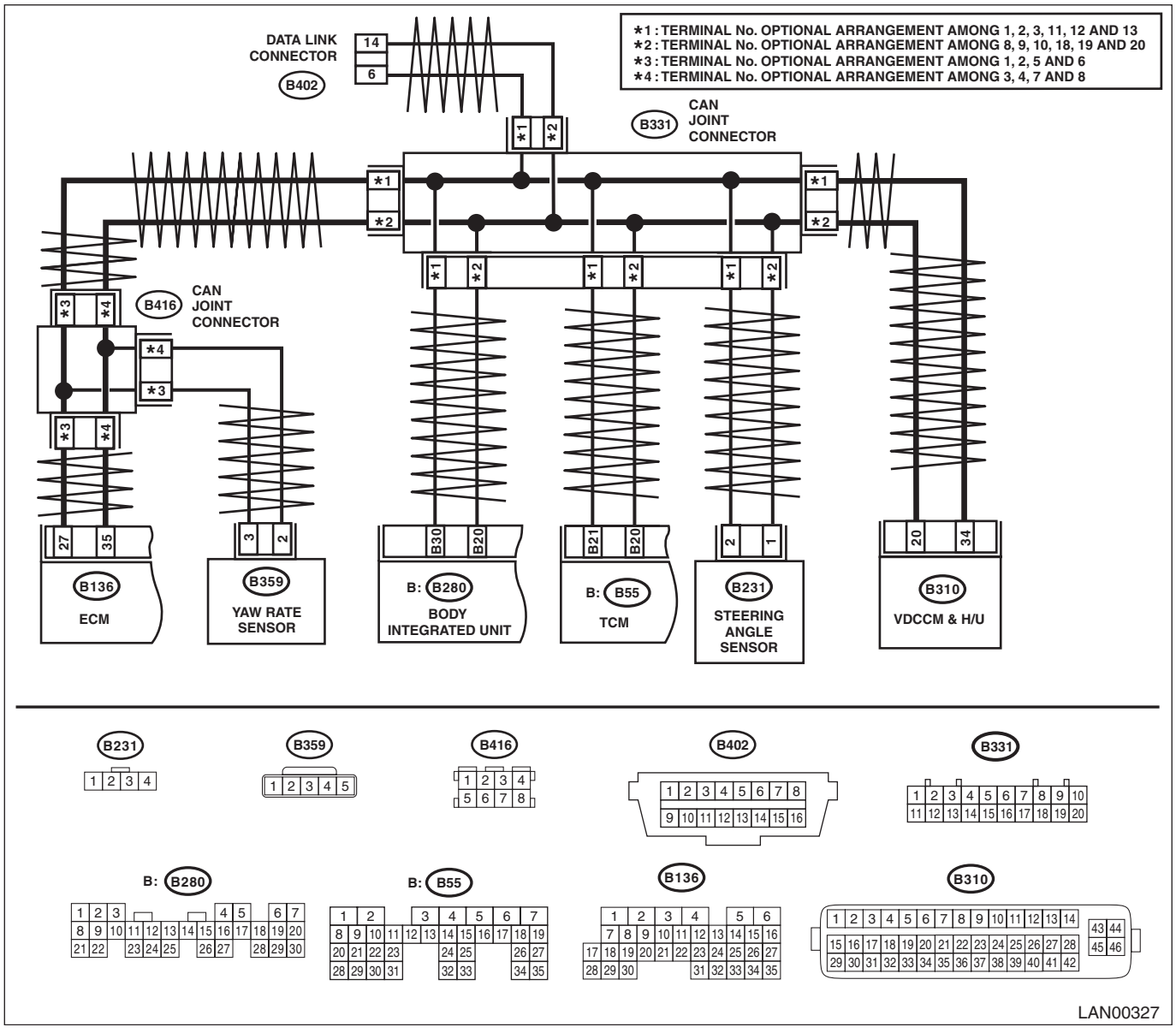
DTC DETECTING CONDITION:
Not received error data from TCM.

NOTE:
When more than two DTCs are displayed. <Ref. to LAN(diag)-30, DTC TABLE, LIST, List of Diagnostic Trouble Code (DTC).>

TROUBLE SYMPTOM:
- Malfunction indicator light illuminates.
- “Er HC” is displayed in odo/trip meter.
- P0600 (ECM) and C0057 (VDCCM) are output.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

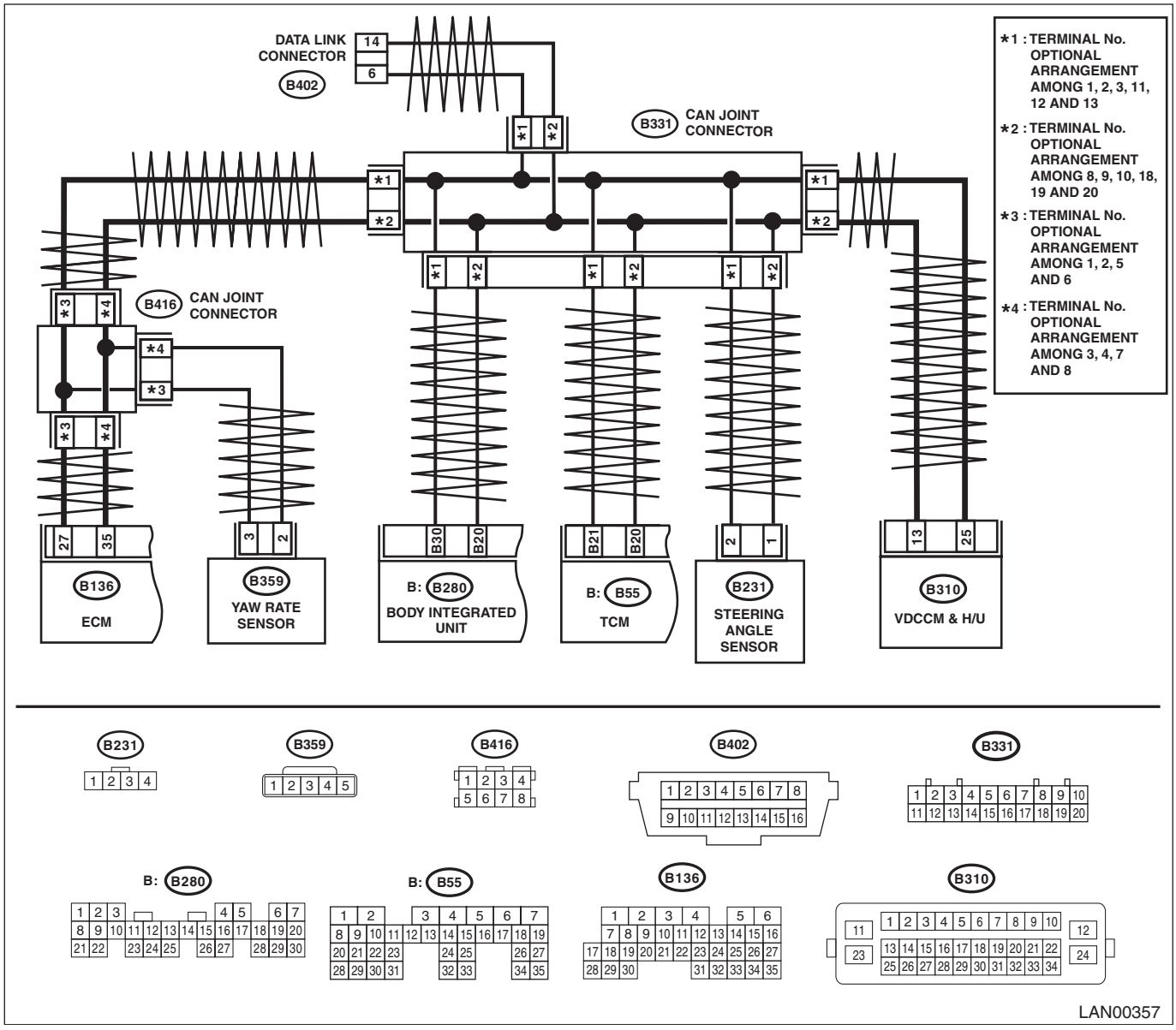
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1222 a current malfunction?	Go to step **3**.	Go to step **7**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1222 a current malfunction?	Go to step **4**.	Go to step **7**.
4	**CHECK HARNESS.** 1) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B55) No. 20 — (B402) No. 14:*** ***(B55) No. 21 — (B402) No. 6:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the harness.
5	**CHECK DTC.** 1) Connect the disconnected connectors. 2) Start the engine and stop. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1222 a current malfunction?	Go to step **6**.	Go to step **7**.
6	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are DTCs P0600 or P0044, P0045 displayed?	Replace the TCM. <Ref. to 5AT-60, Transmission Control Module (TCM).>	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
7	**CHECK HARNESS.** 1) Shake the harness used for CAN communication circuit. 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**.
8	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal where poor contact exists, or replace harness.	Temporary poor contact occurs.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1222 a current malfunction?	Go to step **3**.	Go to step **7**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1222 a current malfunction?	Go to step **4**.	Go to step **7**.
4	**CHECK HARNESS.** 1) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B55) No. 20 — (B402) No. 14:*** ***(B55) No. 21 — (B402) No. 6:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the harness.
5	**CHECK DTC.** 1) Connect the disconnected connectors. 2) Start the engine and stop. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1222 a current malfunction?	Go to step **6**.	Go to step **7**.
6	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are DTCs P0600 or P0044, P0045 displayed?	Replace the TCM. <Ref. to 5AT-60, Transmission Control Module (TCM).>	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
7	**CHECK HARNESS.** 1) Shake the harness used for CAN communication circuit. 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**.
8	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all the connector that is connected to high speed CAN circuit.	Is there poor contact in connector terminal?	Repair the connector terminal where poor contact exists, or replace harness.	Temporary poor contact occurs.

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

DTC DETECTING CONDITION:

Not received error data from VDCCM. (If error is in the main harness, DTC P0600 High-speed CAN circuit is input at the same time.)

NOTE:

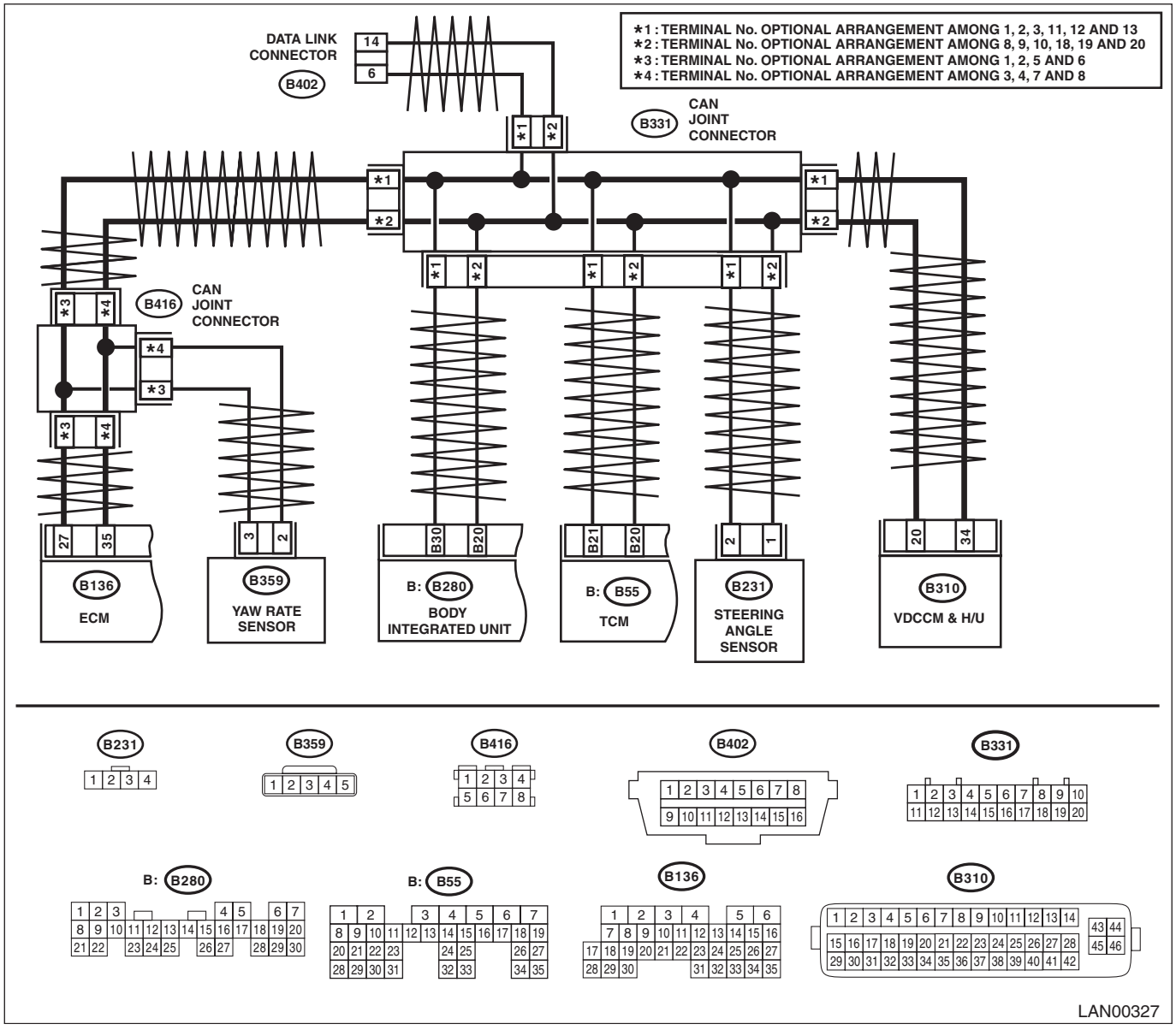
When more than two DTCs are displayed. <Ref. to LAN(diag)-30, DTC TABLE, LIST, List of Diagnostic Trouble Code (DTC).>

TROUBLE SYMPTOM:

- ABS warning light and VDC warning light illuminate.
- “Er HC” is displayed in odo/trip meter.
- P0600 (ECM) and C1718 (TCM) are output.

1. VDC CONTROL MODULE IDENTIFICATION NUMBER W2

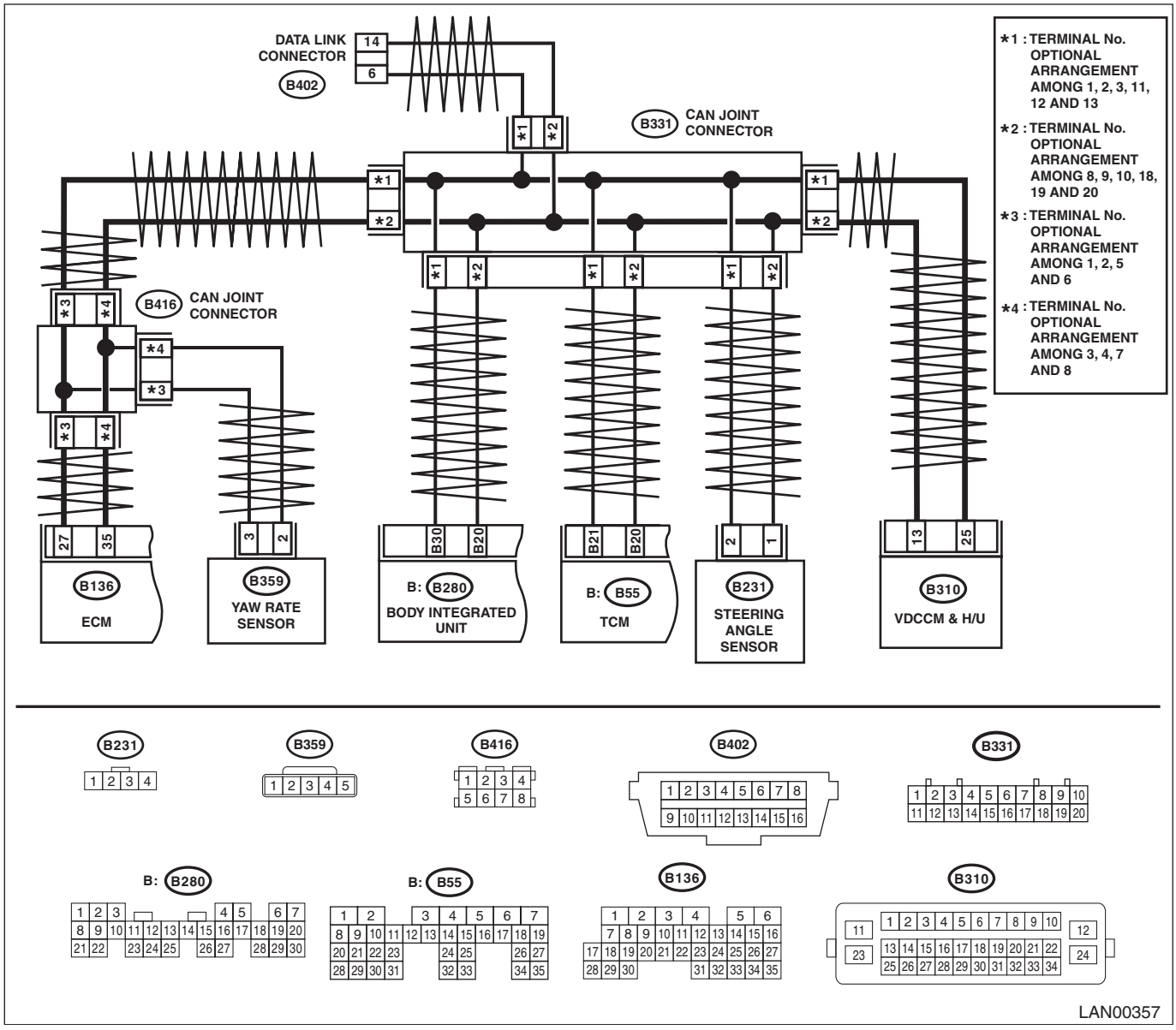
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1223 a current malfunction?	Go to step **3**.	Go to step **7**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1223 a current malfunction?	Go to step **4**.	Go to step **7**.
4	**CHECK HARNESS.** 1) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 6 — (B310) No. 34:*** ***(B402) No. 14 — (B310) No. 20:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the harness.
5	**CHECK DTC.** 1) Connect the disconnected connectors. 2) Start the engine and stop. 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**.
6	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Is P1718 or P0600 displayed?	Replace the VDC/ABS CM. <Ref. to VDC-10, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
7	**CHECK HARNESS.** 1) Shake the harness used for CAN communication circuit. 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**.
8	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, 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.

2. VDC CONTROL MODULE IDENTIFICATION NUMBER W3

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Are there any U1201, U1202, DTCs other than for the body integrated unit?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Check DTC indicated by body integrated unit.	Is U1223 a current malfunction?	Go to step **3**.	Go to step **7**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, B231) that are connected to high speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1223 a current malfunction?	Go to step **4**.	Go to step **7**.
4	**CHECK HARNESS.** 1) Disconnect all connectors (B280, B310, B55, B136, B230, B231) that are connected to high speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(B402) No. 6 — (B310) No. 34:*** ***(B402) No. 14 — (B310) No. 13:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the harness.
5	**CHECK DTC.** 1) Connect the disconnected connectors. 2) Start the engine and stop. 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**.
6	**CHECK DTC.** Using the Subaru Select Monitor, read all DTCs.	Is P1718 or P0600 displayed?	Replace the VDC/ABS CM. <Ref. to VDC-10, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
7	**CHECK HARNESS.** 1) Shake the harness used for CAN communication circuit. 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**.
8	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors (B280, B310, B55, B136, B359, 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.

Q: DTC U1300 CAN-LS MALFUNCTION

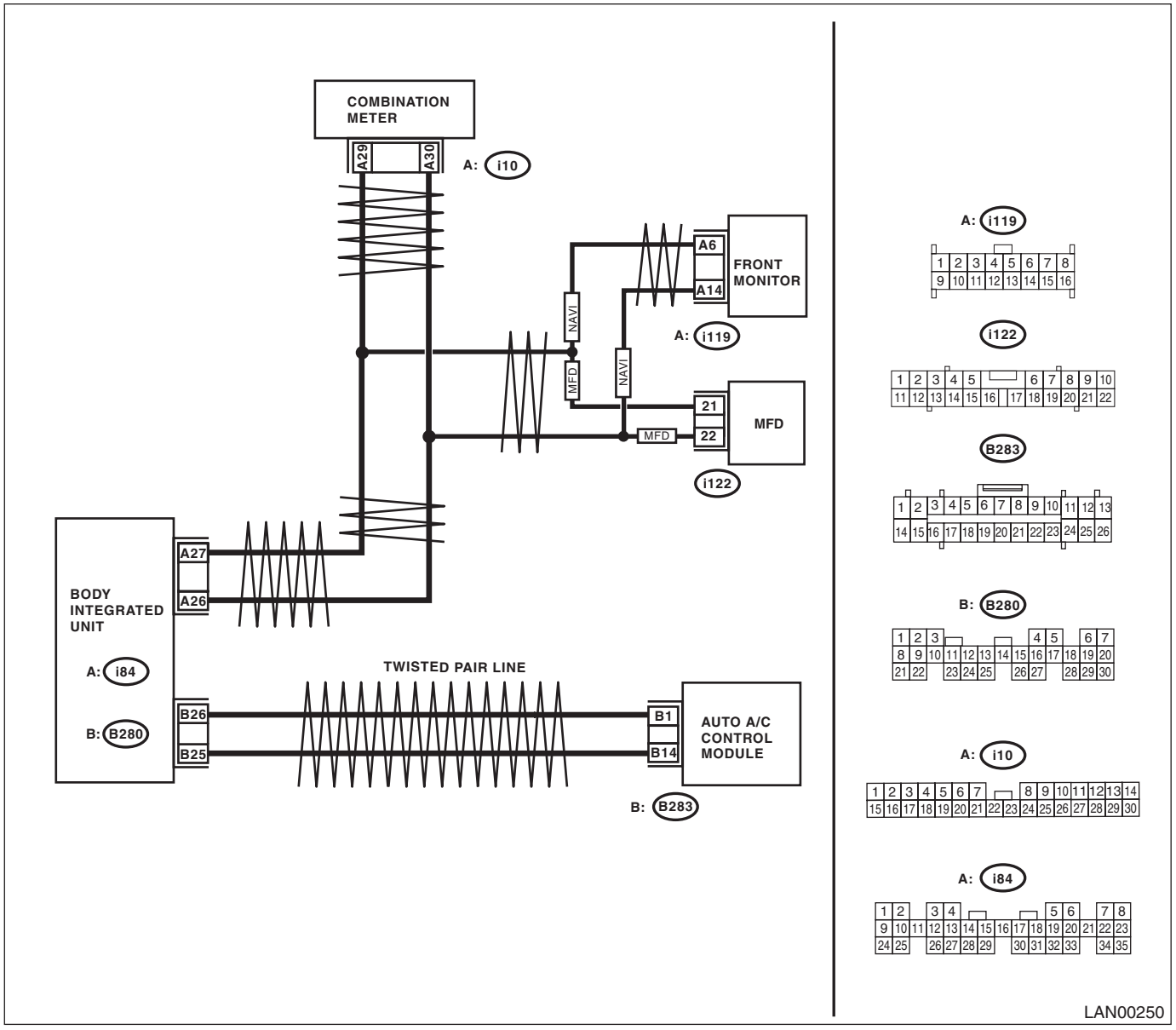
DTC DETECTING CONDITION:

Either end of low-speed CAN communication line is open or shorted, the connector is not connected properly, or the terminal has poor crimping.

TROUBLE SYMPTOM:

“Er LC” is displayed in odo/trip meter, but communicating function is OK.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1300 a current malfunction?	Go to step **2**.	Go to step **12**.
2	**CHECK DTC.** 1) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 2) Connect the disconnected connectors. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1300 a current malfunction?	Go to step **3**.	Go to step **12**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(i84) No. 27 — (i10) No. 29 (combination meter):*** ***(i84) No. 26 — (i10) No. 30 (combination meter):*** ***(B280) No. 25 — (B283) No. 14 (auto A/C):*** ***(B280) No. 26 — (B283) No. 1 (auto A/C):*** ***(i84) No. 27 — (i122) No. 21 (MFD):*** ***(i84) No. 26 — (i122) No. 22 (MFD):*** ***(i84) No. 27 — (i119) No. 6 (navigation):*** ***(i84) No. 26 — (i119) No. 14 (navigation):***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the harness.
4	**CHECK CURRENT DATA.** Display the current data (Auto A/C failure) of body integrated unit using the Subaru Select Monitor.	Is OK displayed?	Go to step **5**.	Perform auto A/C self-diagnosis. <Ref. to AC(diag)-10, OPERATION, Diagnostic Chart for Self-diagnosis.>
5	**CHECK AUTO A/C CONTROL MODULE.** 1) Turn the ignition switch to OFF. 2) Disconnect the auto A/C control module connector (B283). 3) Turn the ignition switch to ON, and read the DTC.	Does U1300 disappear?	Go to step **6**.	Go to step **7**.
6	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280) and auto A/C control module connector (B283). 2) Check open or short conditions between body integrated unit connector and auto A/C control module connector. ***Connector & terminal*** ***(B283) No. 1 — (B280) No. 26:*** ***(B283) No. 14 — (B280) No. 25:***	Is the harness OK?	Replace the auto A/C control module. <Ref. to AC-35, REMOVAL, Control Unit (Auto A/C Model).>	Repair or replace the open or short circuit of harness.
7	**CHECK CURRENT DATA.** Using the Subaru Select Monitor, display current data (meter failure) of the body integrated unit.	Is OK displayed?	Go to step **8**.	Replace the combination meter. <Ref. to IDI-12, REMOVAL, Combination Meter.>

	Step	Check	Yes	No
8	**CHECK COMBINATION METER.** 1) Turn the ignition switch to OFF. 2) Disconnect the combination meter connector. 3) Turn the ignition switch to ON.	Is U1300 detected?	Go to step **10**.	Go to step **9**.
9	**CHECK NAVIGATION OR MFD.** 1) Turn the ignition switch to OFF. 2) Connect the disconnected connectors. 3) Disconnect the connector of navigation (i119) or MFD (i122). 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1300 a current malfunction?	Go to step **10**.	Repair the navigation or audio.
10	**CHECK AUTO A/C ECM.** 1) Turn the ignition switch to OFF. 2) Connect the navigation or MFD connector. 3) Disconnect the auto A/C ECM connector (B283). 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1300 a current malfunction?	Go to step **11**.	Replace the auto A/C control module.
11	**CHECK BODY INTEGRATED UNIT.** 1) Turn the ignition switch to OFF. 2) Connect the auto A/C control module. 3) Replace the body integrated unit of your vehicle with the body integrated unit from other vehicle, which is working normally. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1300 a current malfunction?	Replace the combination meter. <Ref. to IDI-12, REMOVAL, Combination Meter.>	Replace the body integrated unit.
12	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for CAN communication circuit. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1300 a current malfunction?	Repair or replace the harness.	Go to step **13**.
13	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 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.

R: DTC U1301 CAN-LS COUNTER ABNORMAL

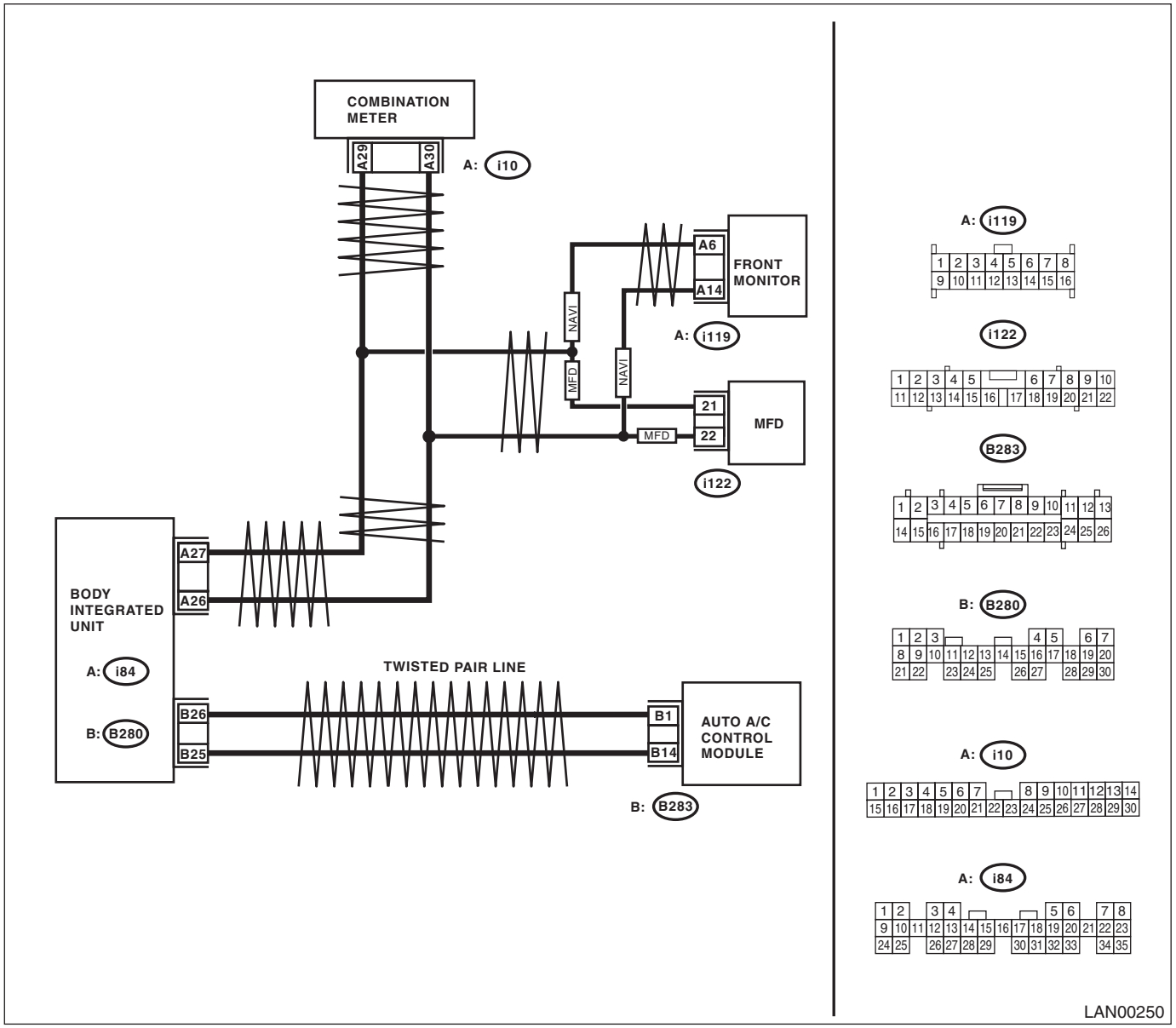
DTC DETECTING CONDITION:

Communication becomes unstable because of low speed CAN communication error.

TROUBLE SYMPTOM:

“Er LC” is displayed in odo/trip meter.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Are there DTC U1300 or U1301?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1301 a current malfunction?	Go to step **3**.	Go to step **9**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1301 a current malfunction?	Go to step **4**.	Go to step **9**.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(i84) No. 27 — (i10) No. 29 (combination meter):*** ***(i84) No. 26 — (i10) No. 30 (combination meter):*** ***(B280) No. 25 — (B283) No. 14 (auto A/C):*** ***(B280) No. 26 — (B283) No. 1 (auto A/C):*** ***(i84) No. 27 — (i122) No. 21 (MFD):*** ***(i84) No. 26 — (i122) No. 22 (MFD):*** ***(i84) No. 27 — (i119) No. 6 (navigation):*** ***(i84) No. 26 — (i119) No. 14 (navigation):***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the harness.
5	**CHECK AUDIO OR NAVIGATION.** 1) Connect the disconnected connectors. 2) Disconnect the connector of navigation (i119) or MFD (i122). 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1301 a current malfunction?	Go to step **6**.	Go to step **9**.
6	**CHECK AUTO A/C CONTROL MODULE.** 1) Turn the ignition switch to OFF. 2) Connect the audio or navigation module. 3) Disconnect the auto A/C control module connector (B283). 4) 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-35, REMOVAL, Control Unit (Auto A/C Model).>
7	**CHECK COMBINATION METER.** 1) Turn the ignition switch to OFF. 2) Connect the disconnected connectors. 3) Perform the self-diagnosis of combination meter.	Is the self-diagnosis of combination meter OK?	Go to step **8**.	Replace the combination meter.

	Step	Check	Yes	No
8	**CHECK BODY INTEGRATED UNIT.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC U1301 a current malfunction?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Go to step **9**.
9	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Shake the harness used for low speed CAN communication circuit. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1301 a current malfunction?	Repair or replace the harness.	Go to step **10**.
10	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	Temporary poor contact occurs.

S: DTC U1302 CAN-LS BUS OFF

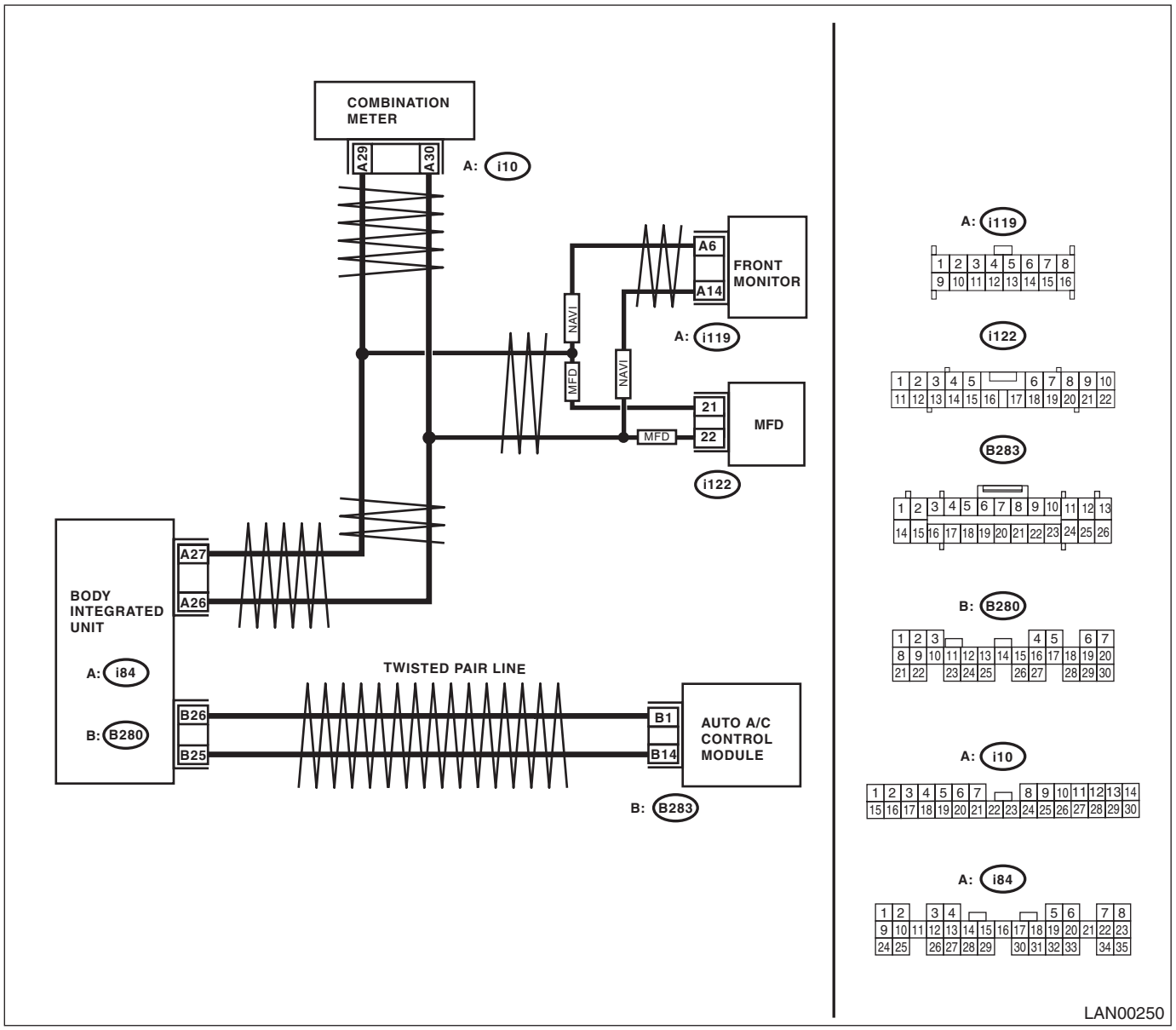
DTC DETECTING CONDITION:

- Open or power supply-output short, GND-output short occurs in both CAN line.
- Internal error in each control module

TROUBLE SYMPTOM:

"Er LC" is displayed in odo/trip meter.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1302 a current malfunction?	Go to step **2**.	Go to step **8**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Connect the disconnected connectors. 4) 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	**CHECK HARNESS.** 1) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 2) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(i84) No. 26 — (i10) No. 30 (combination meter):*** ***(i84) No. 27 — (i10) No. 29 (combination meter):*** ***(B280) No. 25 — (B283) No. 14 (auto A/C):*** ***(B280) No. 26 — (B283) No. 1 (auto A/C):*** ***(i84) No. 26 — (i85) No. 22 (MFD):*** ***(i84) No. 27 — (i85) No. 21 (MFD):*** ***(i84) No. 26 — (i50) No. 14 (navigation):*** ***(i84) No. 27 — (i50) No. 6 (navigation):***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the harness.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Connect the disconnected connectors. 3) Using the tester, measure the resistance between harness connector and chassis ground. ***Connector & terminal*** ***(i84) No. 26 — Chassis ground:*** ***(i84) No. 27 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **5**.	Go to step **7**.
5	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Using the tester, measure the voltage between harness connector and chassis ground. ***Connector & terminal*** ***(i84) No. 26 (+) — Chassis ground (–):*** ***(i84) No. 27 (+) — Chassis ground (–):***	Is the voltage less than 6 V?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Go to step **6**.
6	**CHECK HARNESS.** With the tester connected, disconnect control module.	Is there any control module that the voltage becomes 6 V or less.	Replace the control module whose voltage has changed.	Repair or replace the short circuit of the harness.
7	**CHECK HARNESS.** 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.

	Step	Check	Yes	No
8	**CHECK HARNESS.** 1) Shake the harness used for low speed CAN communication circuit. 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**.
9	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	Temporary poor contact occurs.

T: DTC U1311 CAN-LS METER UNIT DATA ABNORMAL

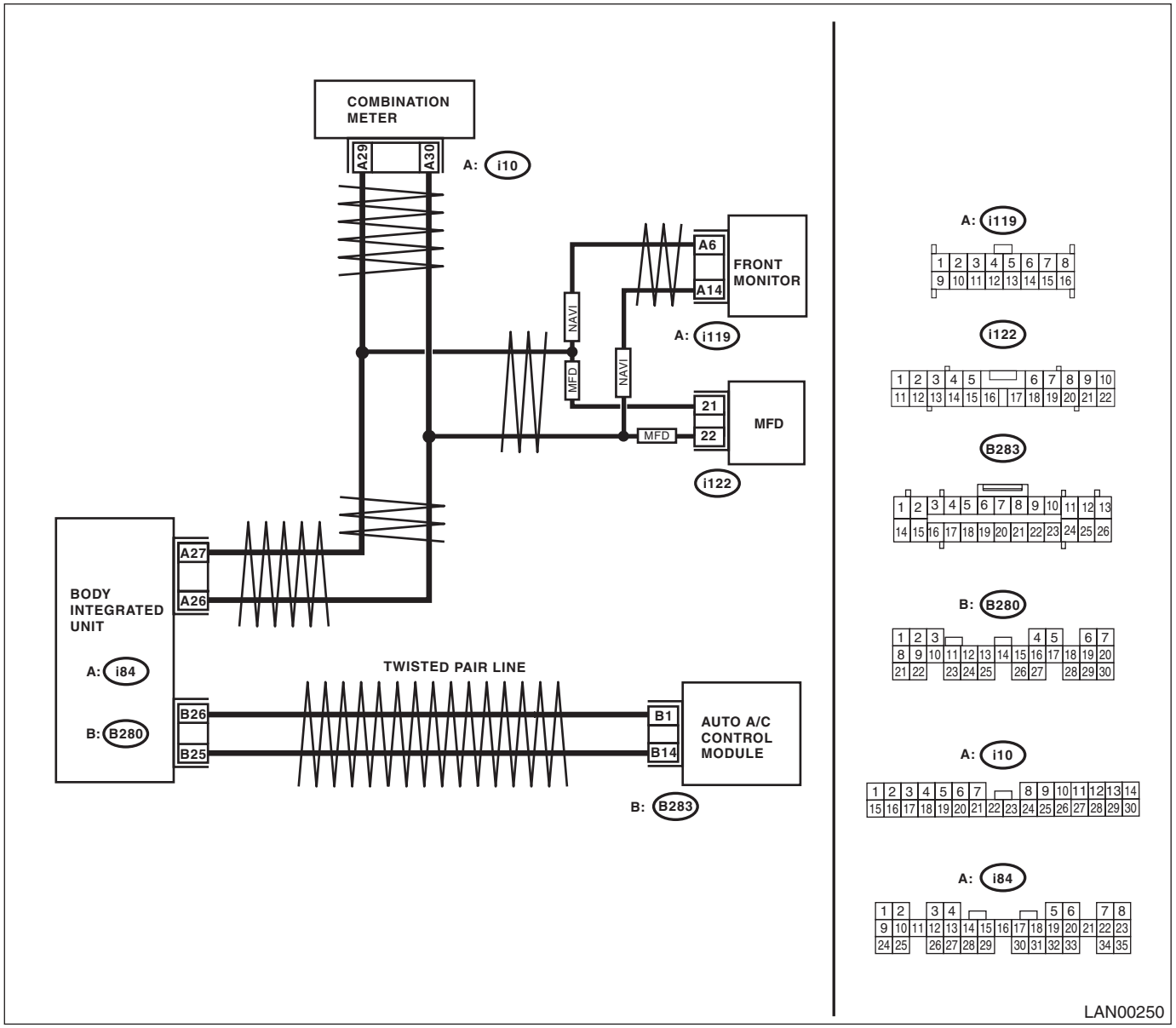
DTC DETECTING CONDITION:

Error data is received from combination meter.

TROUBLE SYMPTOM:

“Er Lc” is displayed in odo/trip meter.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC U1301 or U1302 displayed?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** 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	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the combination meter connector (i10). 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1311 a current malfunction?	Replace the combination meter. <Ref. to IDI-12, REMOVAL, Combination Meter.>	Go to step **4**.
4	**CHECK HARNESS.** 1) Shake the harness used for low speed CAN communication circuit. 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	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	Temporary poor contact occurs.

U: DTC U1313 CAN-LS MONITOR DATA ABNORMAL

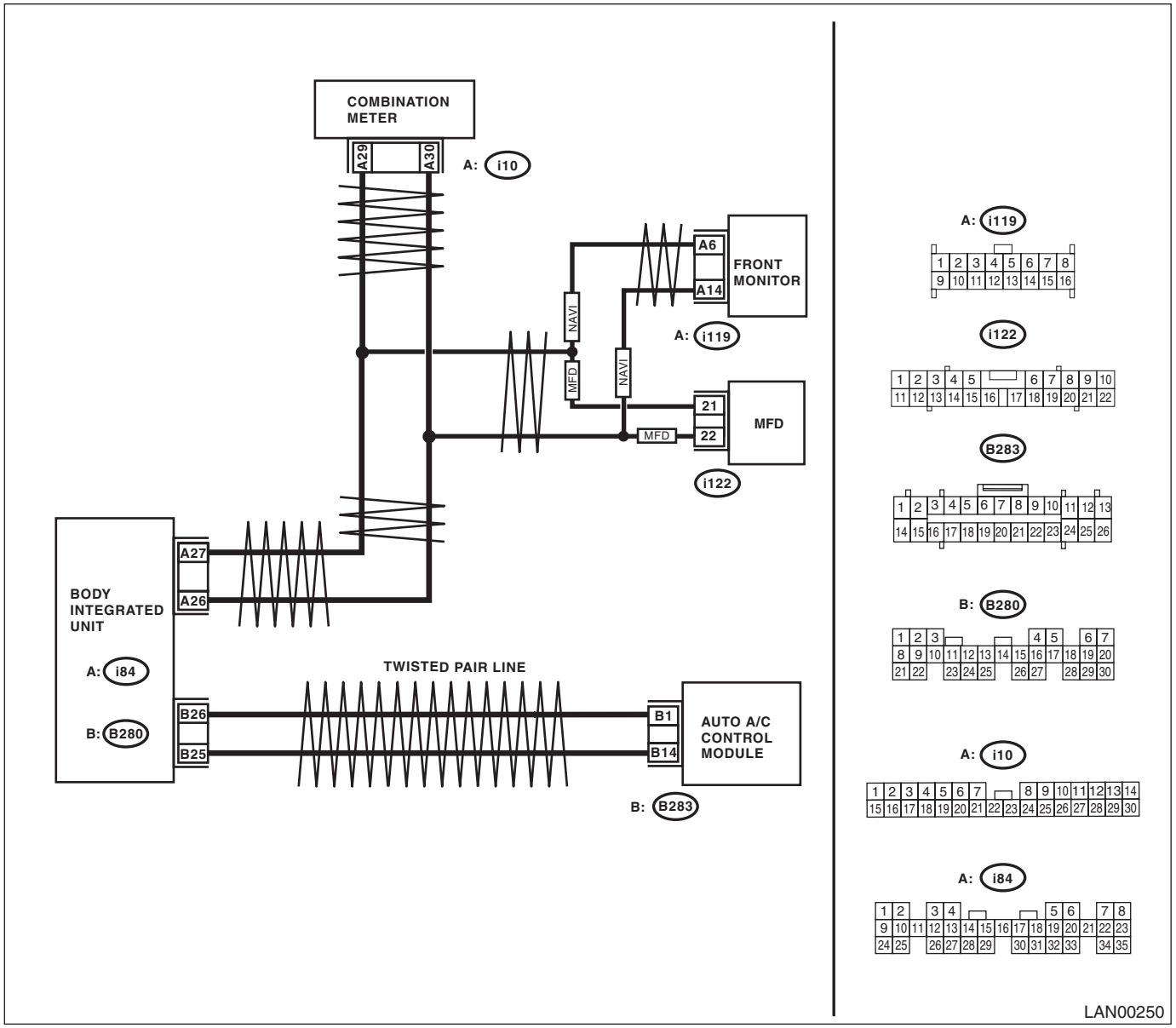
DTC DETECTING CONDITION:

Center display unit error or error data received from center display.

TROUBLE SYMPTOM:

“Er LC” is displayed in odo/trip meter.

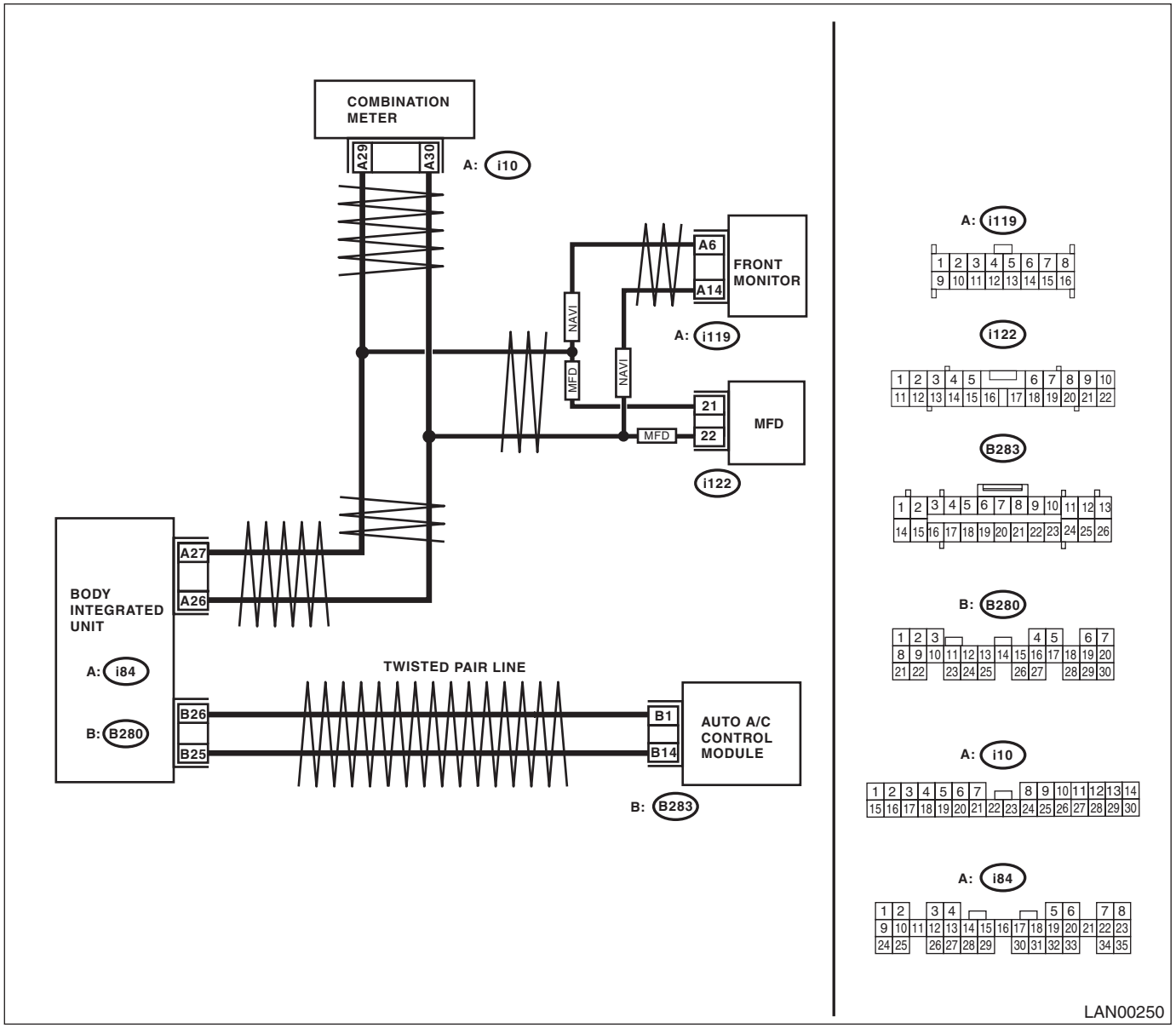
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC U1301 or U1302 displayed?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1313 a current malfunction?	Go to step **3**.	Go to step **4**.
3	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector of front monitor (i119) or MFD (i122). 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1313 a current malfunction?	Replace the front monitor or MFD. <Ref. to ET-22, REMOVAL, Navigation Display.>	Go to step **4**.
4	**CHECK HARNESS.** 1) Shake the harness used for low speed CAN communication circuit. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1313 a current malfunction?	Repair or replace the harness.	Go to step **5**.
5	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	Temporary poor contact occurs.

V: DTC U1321 CAN-LS METER NO-RECEIVE DATA

DTC DETECTING CONDITION:
Not received error data from combination meter.
TROUBLE SYMPTOM:
Engine may not be started.
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK ALL DTCS.** Using the Subaru Select Monitor, read all DTCs.	Is DTC U1301 or U1302 displayed?	Perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK DTC.** 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	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1321 a current malfunction?	Go to step **4**.	Go to step **7**.
4	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(i84) No. 26 — (i10) No. 30 (combination meter):*** ***(i84) No. 27 — (i10) No. 29 (combination meter):*** ***(B280) No. 25 — (B283) No. 14 (auto A/C):*** ***(B280) No. 26 — (B283) No. 1 (auto A/C):*** ***(i84) No. 26 — (i85) No. 22 (MFD):*** ***(i84) No. 27 — (i85) No. 21 (MFD):*** ***(i84) No. 26 — (i50) No. 14 (navigation):*** ***(i84) No. 27 — (i50) No. 6 (navigation):***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair or replace the harness.
5	**CHECK COMBINATION METER.** 1) Connect the disconnected connectors. 2) Perform the self-diagnosis of combination meter.	Is the self-diagnosis OK?	Go to step **6**.	Replace the combination meter.
6	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is U1321 a current malfunction?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Go to step **7**.
7	**CHECK HARNESS.** 1) Shake the harness used for low speed CAN communication circuit. 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	**CHECK CONNECTOR.** 1) Turn the ignition switch to OFF. 2) Disconnect all connectors for control module (i84 or B280, i10, B283, i119 or i122) that are connected to low speed CAN communication line.	Is there poor contact in connector terminal?	Repair the connector terminal, or replace harness.	It is possible that temporary poor contact occurs.

W: DTC B1500 KEYLESS UART COM. MALFUNCTION

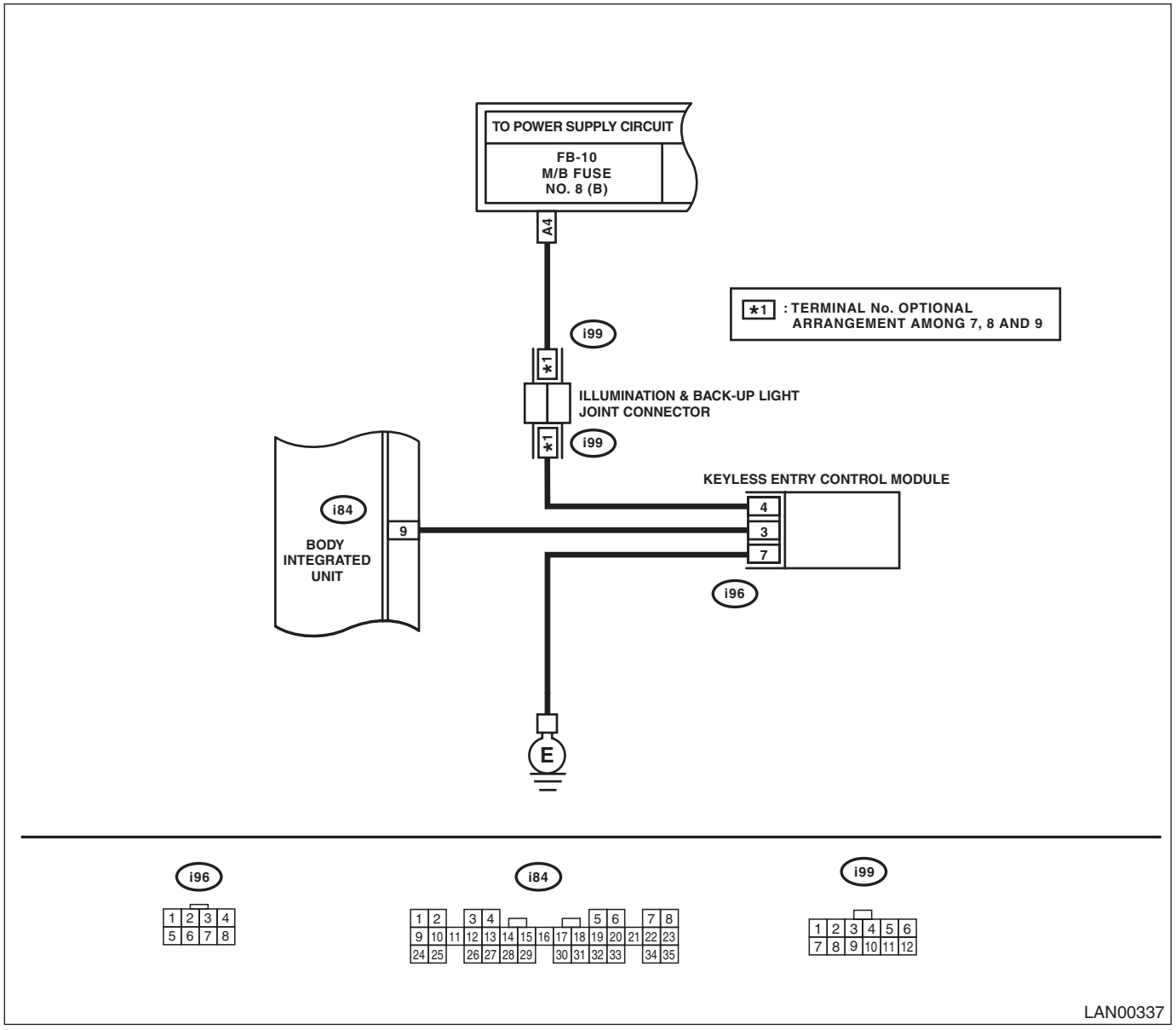
DTC DETECTING CONDITION:

UART (communication line) between keyless entry control module and body integrated unit is open or shorted, the connector is not connected properly, or the terminal is crimped improperly, keyless entry control module internal error.

TROUBLE SYMPTOM:

Door lock does not operate with keyless.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK DTC.** 1) Insert and remove the ignition key. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1500 current malfunction?	Go to step **2**.	Go to step **6**.
2	**CHECK DTC.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from body integrated unit and keyless entry control module. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1500 current malfunction?	Go to step **3**.	Go to step **6**.
3	**CHECK HARNESS.** 1) Turn the ignition switch to OFF. 2) Disconnect the connectors from body integrated unit and keyless entry control module. 3) Using the tester, measure the resistance between terminals of harness. ***Connector & terminal*** ***(i84) No. 9 — (i96) No. 3:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair the open circuit of harness or replace harness.
4	**CHECK HARNESS.** Using the tester, measure the voltage between keyless entry control module and chassis ground. ***Connector & terminal*** ***(i96) No. 4 (+) — Chassis ground (–):***	Is the voltage battery voltage?	Go to step **5**.	Check the power supply circuit for keyless entry control module.
5	**OPERATION CHECK.** 1) Install the keyless entry control module from other vehicle, which is working normally. 2) Register the keyless key which is working normally. 3) Operate the keyless key.	Is the door locking operate?	Replace the keyless entry control module. <Ref. to SL-50, REMOVAL, Keyless Entry Control Module.>	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
6	**CHECK CONNECTOR.** Disconnect the connectors from body integrated unit and keyless entry control module.	Is there poor contact in connector?	Repair the connector, or replace harness.	Temporary poor contact occurs.