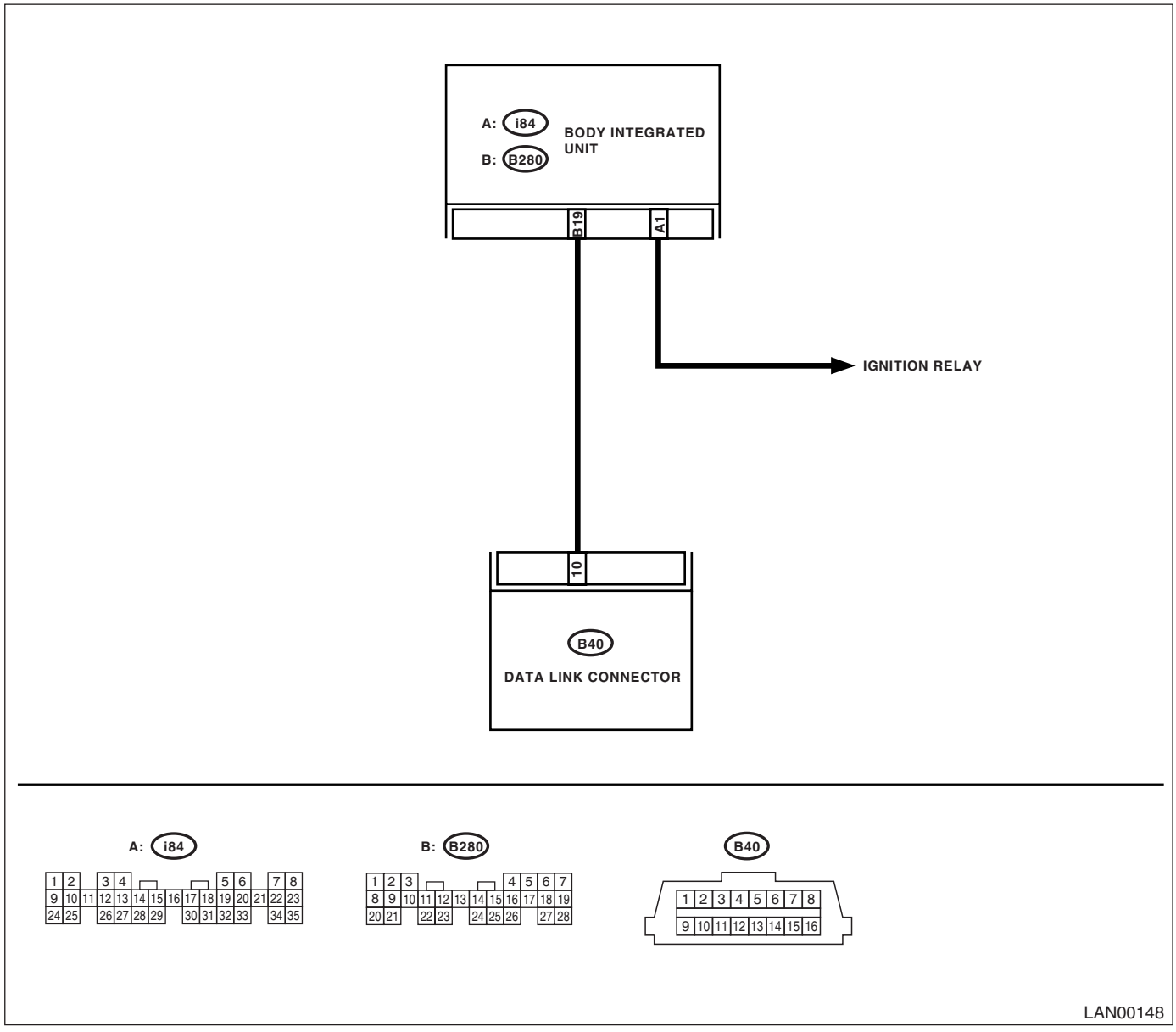
12.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

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.
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 more than 11 V?	Go to step **3**.	Charge or replace the battery.
3	**CHECK BATTERY TERMINAL.**	Is there poor contact at 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 systems can be executed normally.	Are system and model year 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 systems can be executed normally.	Are system and model year displayed?	Go to step **7**.	Go to step **6**.
6	**CHECK HARNESS CONNECTOR BETWEEN EACH CONTROL UNIT 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*** ***(B40) No. 10 — Chassis ground:***	Is the resistance more than 1 MΩ?	Go to step **7**.	Repair the harness and connector between each control unit 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*** ***(B40) No. 10 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair the harness and connector between each control unit 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*** ***(B40) No. 10 — (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.

	Step	Check	Yes	No
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 more than 10 V?	Go to step **11**.	Repair the open circuit of harness between body integrated unit and battery.
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 more than 1 MΩ?	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 unit 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 "REGISTRATION MANUAL FOR IMMOBILIZER".

B: DIAGNOSTIC TROUBLE CODE (DTC) IS NOT STORED

DIAGNOSIS:
Defective combination meter
TROUBLE SYMPTOM:
- Communication error display in odo/trip meter is not cleared.
- "No trouble code" is displayed on Subaru Select Monitor.

NOTE:
If DTC is not displayed on Subaru Select Monitor, LAN communication System should be OK.

	Step	Check	Yes	No
1	**CHECK COMMUNICATION ERROR DISPLAY WITH COMBINATION METER.** Turn the ignition switch to ON.	Is communication error displayed?	Inspect the DTC.	Go to step **2**.
2	**CHECK COMBINATION METER.** Perform the self-diagnosis of combination meter.	Is combination meter OK?	Go to step **3**.	Replace the combination meter. <Ref. to IDI-11, Combination Meter.>
3	**CHECK THE BODY INTEGRATED UNIT.** 1) Display the current data of ECM using Subaru Select Monitor. 2) Check data of "body integrated unit data received".	Is "Yes" displayed?	Go to step **4**.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
4	**CHECK THE BODY INTEGRATED UNIT.** 1) Display the current data of ECM using Subaru Select Monitor. 2) Check data of "body Integrated unit counter update".	Is "Yes" displayed?	Repair the poor contact of connector.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>

C: DTC B0100 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 ALL DTCS.**	Is DTC concerning ECM displayed?	Go to step **2**.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
2	**CHECK DTC CONCERNING ECM.**	Is output DTC on ECM concerning CAN communication error?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Perform the diagnosis according to DTC concerning ECM.

D: DTC B0101 BATT P/SUPPLY MALFUNCTION CONT.

DTC DETECTING CONDITION:

Battery power supply control circuit is open or shorted.

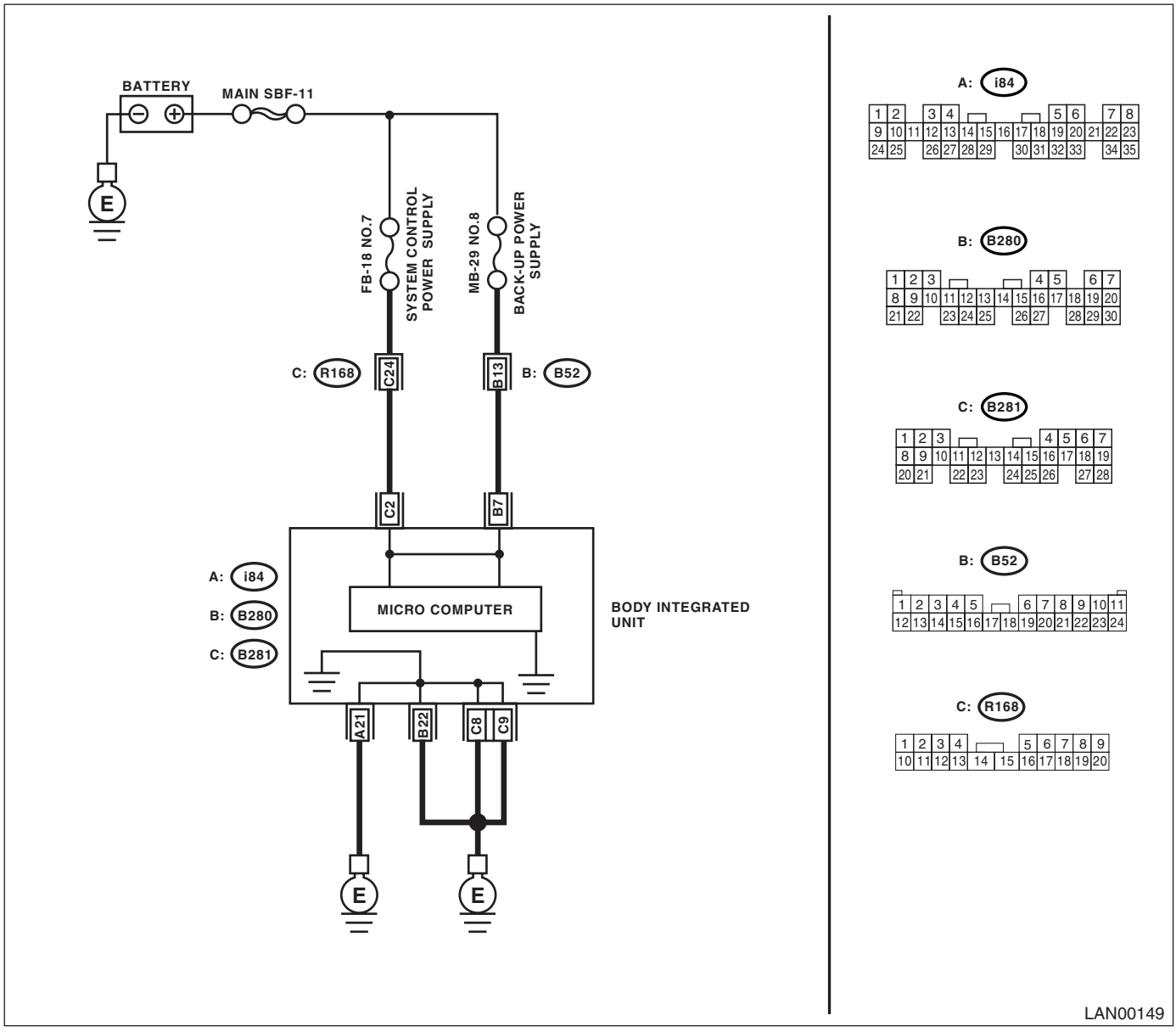
TROUBLE SYMPTOM:

No malfunction occurs because the back-up power supply is activated.

NOTE:

When B0102 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 FUSE.** 1) Turn the ignition switch to OFF. 2) Remove the fuse (No. 7).	Is the fuse blown out?	Replace the fuse (No. 7). If the replaced fuse has blown out easily, repair the short circuit of harness between fuse (No. 7) and body integrated unit.	Go to step **2**.
2	**CONTINUITY CHECK OF WIRING HARNESS.** 1) Disconnect the connector (B281) from body integrated unit. 2) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal (B281) No. 2 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **3**.	Repair the harness for open or shorted circuit between body integrated unit and fuse.
3	**CHECK POOR CONTACT OF CONNECTORS.**	Is there poor contact in body integrated unit connector?	Repair the poor contact of connector.	Go to step **4**.
4	**CHECK BODY INTEGRATED UNIT HARNESS.** 1) Connect all the connectors. 2) Perform the clear memory mode. 3) Read DTC.	Is the same DTC displayed?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Temporary poor contact occurs.

E: DTC B0102 BATT P/SUPPLY MALFUNCTION CONT.

DTC DETECTING CONDITION:

Battery power supply backup circuit is open or shorted.

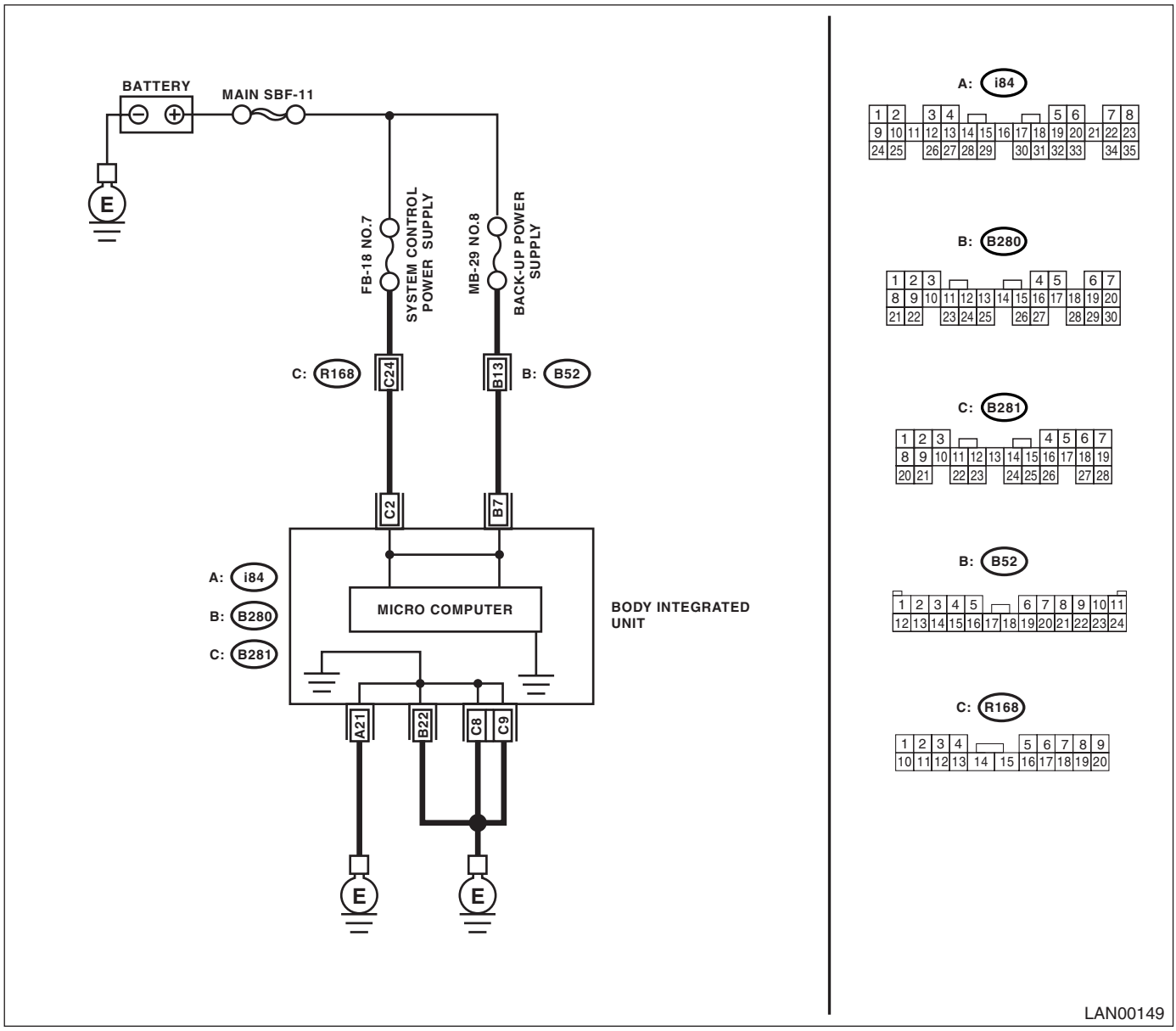
TROUBLE SYMPTOM:

- Engine malfunction indicator light may illuminates.
- Keyless entry, room light and key illumination do not operate.
- “En IU” may display in combination meter.

NOTE:

When some B0101 BATT p/supply 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 FUSE.** 1) Turn the ignition switch to OFF. 2) Remove the fuse (No. 8).	Is the fuse blown out?	Replace the fuse (No. 8). If the replaced fuse has blown out easily, repair the short circuit of harness between fuse (No. 8) and body integrated unit.	Go to step **2**.
2	**CONTINUITY CHECK OF WIRING HARNESS.** 1) Disconnect the connector (B280) from body integrated unit. 2) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal (B280) No. 7 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **3**.	Repair the harness for open or shorted circuit between body integrated unit and fuse.
3	**CHECK POOR CONTACT OF CONNECTORS.**	Is there poor contact in body integrated unit connector?	Repair the poor contact of connector.	Go to step **4**.
4	**CHECK BODY INTEGRATED UNIT HARNESS.** 1) Connect all the connectors. 2) Perform the clear memory mode. 3) Read DTC.	Is the same DTC displayed?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Temporary poor contact occurs.

F: DTC B0103 IGNITION POWER FAILURE

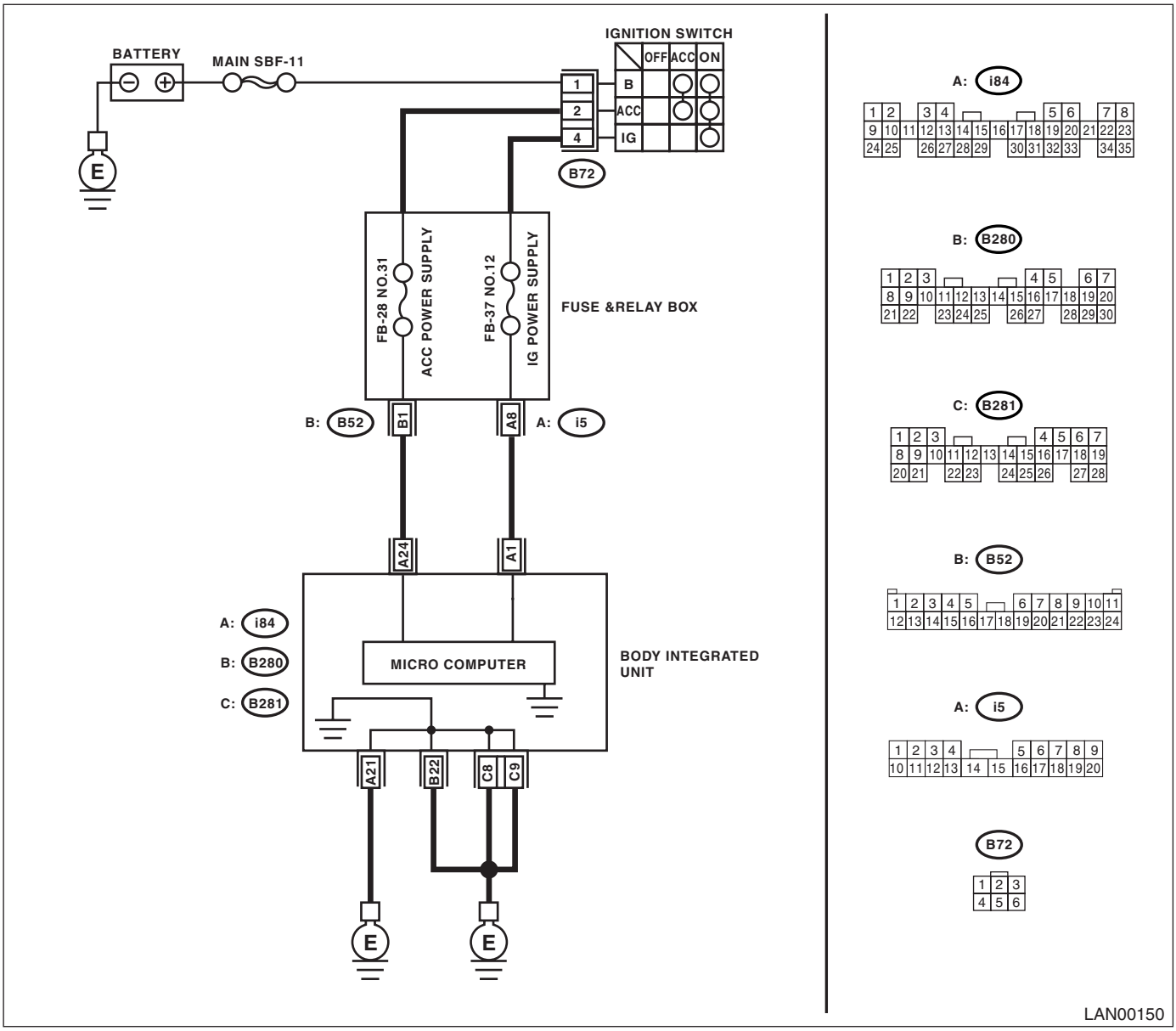
DTC DETECTING CONDITION:

IGN power supply circuit is open or shorted.

TROUBLE SYMPTOM:

Symptoms such as illuminating the malfunction indicator light or high speed CAN error display “Er HC” may occur.

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Remove the fuse (No. 12).	Is the fuse blown out?	Replace the fuse (No. 12). If the replaced fuse has blown out easily, repair the short circuit of harness between fuse (No. 12) and body integrated unit.	Go to step **2**.

	Step	Check	Yes	No
2	**CONTINUITY CHECK OF WIRING HARNESS.** 1) Disconnect the connector (i84) from body integrated unit. 2) Turn the ignition switch to ON. 3) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(i84) No. 1 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **3**.	Repair the harness for open or shorted circuit between body integrated unit and fuse.
3	**CHECK POOR CONTACT OF CONNECTOR.**	Is there poor contact in body integrated unit connector?	Repair the poor contact of connector.	Go to step **4**.
4	**CHECK BODY INTEGRATED UNIT HARNESS.** 1) Connect all the connectors. 2) Perform the clear memory mode. 3) Read DTC.	Is the same DTC displayed?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Temporary poor contact occurs.

G: DTC B0104 ACC POWER FAILURE

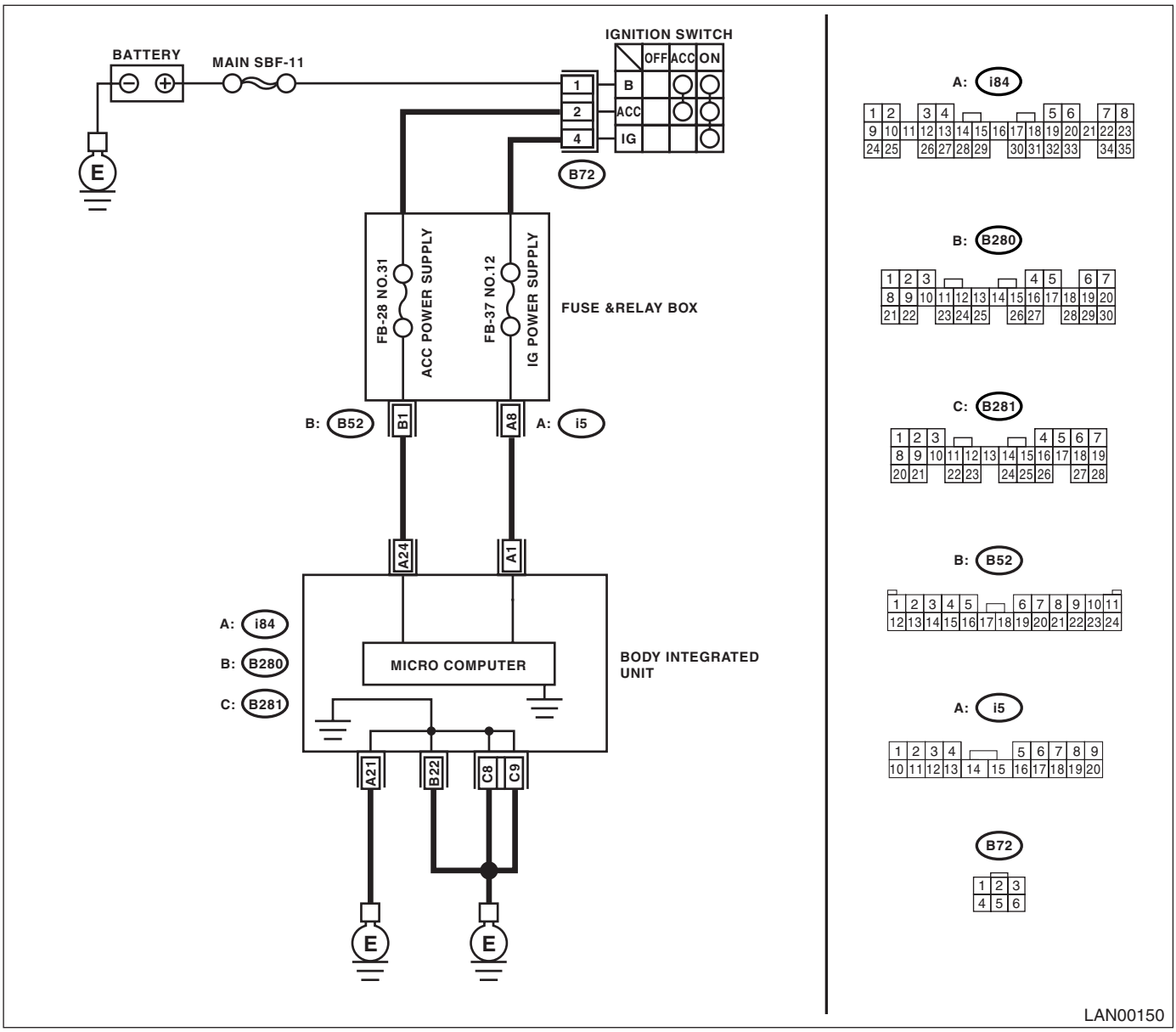
DTC DETECTING CONDITION:

ACC power supply circuit is open or shorted.

TROUBLE SYMPTOM:

Rear wiper may not operate at ACC position.

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK FUSE.** 1) Turn the ignition switch to OFF. 2) Remove the fuse (No. 31).	Is the fuse blown out?	Replace the fuse (No. 31). If the replaced fuse has blown out easily, repair the short circuit of harness between fuse (No. 31) and body integrated unit.	Go to step **2**.

	Step	Check	Yes	No
2	**CONTINUITY CHECK OF WIRING HARNESS.** 1) Disconnect the connector (i84) from body integrated unit. 2) Turn the ignition switch to ON. 3) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(i84) No. 24 (+) — Chassis ground (–):***	Is the voltage more than 10 V?	Go to step **3**.	Repair the harness for open or shorted circuit between body integrated unit and fuse.
3	**CHECK POOR CONTACT OF CONNECTOR.**	Is there poor contact in body integrated unit connector?	Repair the poor contact of connector.	Go to step **4**.
4	**CHECK BODY INTEGRATED UNIT HARNESS.** 1) Connect all the connectors. 2) Perform the clear memory mode. 3) Read DTC.	Is DTC displayed?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Temporary poor contact occurs.

H: DTC B0106 SHIFT LOCK CIRCUIT FAILURE

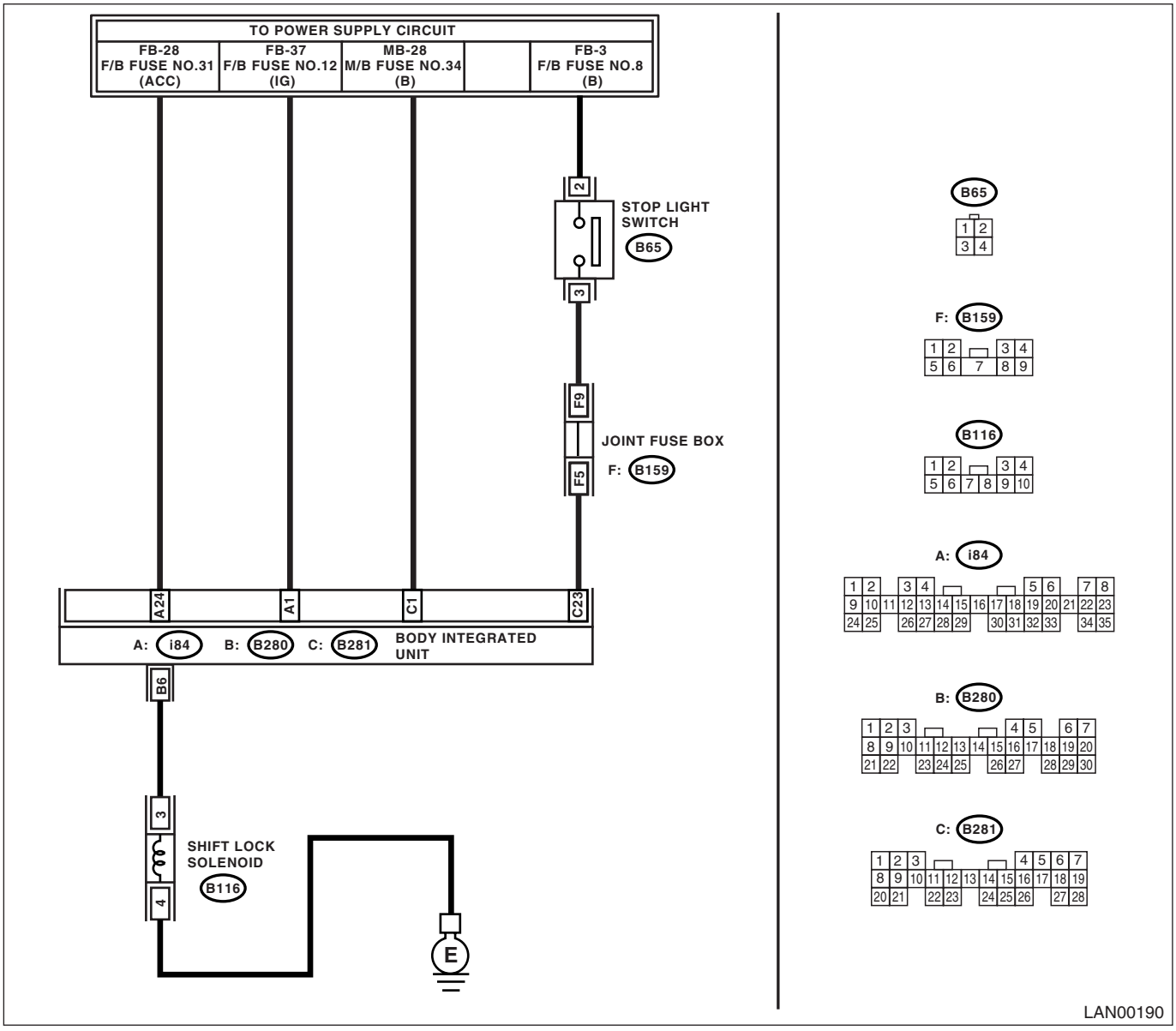
DTC DETECTING CONDITION:

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 HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(B280) No. 6 — Chassis ground:***	Is the resistance between 10 — 30 Ω?	Go to step **5**.	Go to step **2**.

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Disconnect the shift lock solenoid connector (B116). 3) Measure the resistance between body integrated unit connector and shift lock solenoid connector. ***Connector & terminal*** ***(B280) No. 6 — (B116) No. 3:***	Is the resistance less than 10 Ω?	Go to step **3**.	Repair or replace the open or short circuit of harness.
3	**CHECK SHIFT LOCK SOLENOID.** 1) Disconnect the shift lock solenoid connector. 2) Measure the internal resistance of shift lock solenoid. ***Connector & terminal*** ***(B116) No. 3 — No. 4:***	Is the resistance between 10 — 30 Ω?	Go to step **4**.	Replace the shift lock solenoid.
4	**CHECK GROUND CIRCUIT.** 1) Disconnect the shift lock solenoid connector. 2) Measure the resistance between shift lock solenoid connector (B116) and chassis ground. ***Connector & terminal*** ***(B116) No. 4 — Chassis ground:***	Is the resistance less than 10 Ω?	Temporary poor contact occurs. Check the connection of each terminal and repair when necessary.	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>
5	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280) and the shift lock solenoid connector (B116). 2) Measure the resistance between body integrated unit connector (B280) and chassis ground. ***Connector & terminal*** ***(B280) No. 6 — Chassis ground:***	Is the resistance more than 1 MΩ?	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Repair the short circuit of harness or replace harness.

I: DTC B0201 CAN-HS COUNTER ABNORMAL

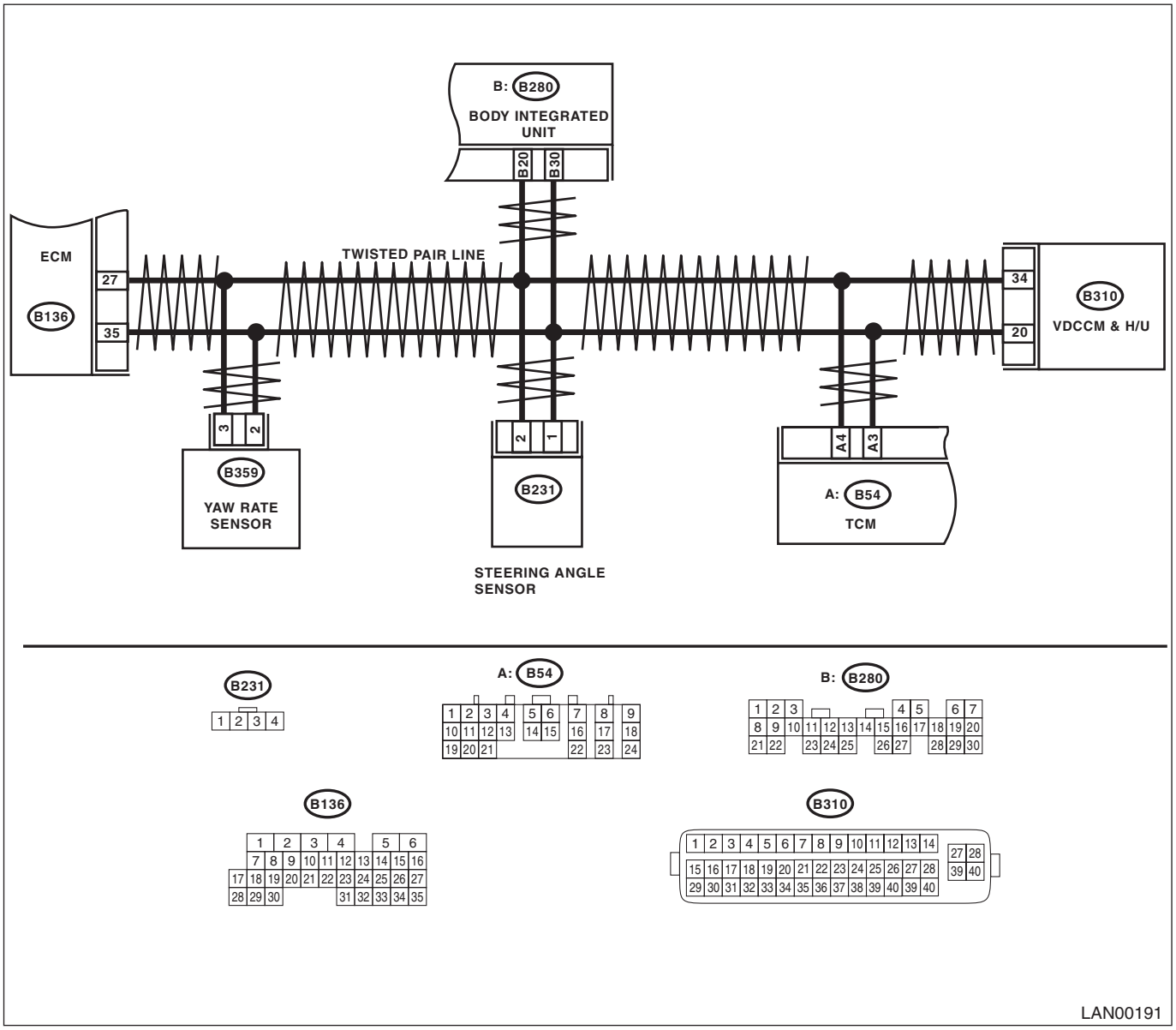
DTC DETECTING CONDITION:

High speed CAN communication of body integrated unit which monitor the error data and non-received data are faulty.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Connect the tester to vehicle side connector, and measure the resistance. ***Connector & terminal (B280) No. 20 — No. 30:***	Is the resistance between 55 — 65 Ω?	Go to step **2**.	Go to step **5**.

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Disconnect the TCM connector (B54). 2) Connect the tester to vehicle side connector, and measure the resistance. ***Connector & terminal*** ***(B54) No. 3 — No. 4:***	Is the resistance between 55 — 65 Ω?	Go to step **3**.	Go to step **5**.
3	**CHECK HARNESS.** 1) Disconnect the yaw rate sensor connector (B359). 2) Connect the tester to vehicle side connector, and measure the resistance. ***Connector & terminal*** ***(B359) No. 2 — No. 3:***	Is the resistance between 55 — 65 Ω?	Go to step **4**.	Go to step **5**.
4	**CHECK HARNESS.** 1) Disconnect the steering angle sensor connector (B231). 2) Connect the tester to vehicle side connector, and measure the resistance. ***Connector & terminal*** ***(B231) No. 1 — No. 2:***	Is the resistance between 55 — 65 Ω?	Go to step **12**.	Go to step **5**.
5	**CHECK HARNESS.**	Is the measured resistance 115 — 125 Ω when connecting the tester to vehicle side connector?	Go to step **8**.	Go to step **6**.
6	**CHECK HARNESS.**	Is the measured resistance less than 10 Ω when connecting the tester to vehicle side connector?	Repair or replace the short circuit of measured related harness.	Go to step **7**.
7	**CHECK HARNESS.**	Is the measured resistance more than 30 MΩ when connecting the tester to vehicle side connector?	Repair or replace the open circuit of measured related harness.	Go to step **12**.
8	**CHECK HARNESS.** 1) Disconnect the VDC CM connector. 2) Connect the tester to vehicle side harness, and measure the resistance. ***Connector & terminal*** ***(B310) No. 20 — No. 34:***	Is the resistance between 115 — 125 Ω?	Go to step **9**.	Go to step **10**.
9	**CHECK CONTROL MODULE.** 1) Connect the VDC CM connector. 2) Disconnect the connector from ECM. 3) Connect the tester to vehicle side harness, and measure the resistance between terminals.	Is the resistance between 115 — 125 Ω?	Go to step **16**.	Replace the VDC CM. <Ref. to VDC-7, VDC Control Module & Hydraulic Control Unit (VDCCM&H/U).>
10	**CHECK HARNESS.** 1) Connect the VDC CM connector. 2) Disconnect the connector from ECM. 3) Connect the tester to vehicle side harness, and measure the resistance between terminals. ***Connector & terminal*** ***(B136) No. 27 — No. 35:***	Is the resistance between 115 — 125 Ω?	Go to step **11**.	Repair or replace the open circuit of main wiring harness.
11	**CHECK CONTROL MODULE.** Connect the tester to ECM terminal, and measure the resistance.	Is the resistance between 115 — 125 Ω?	Go to step **12**.	Replace the ECM. <Ref. to FU(H6DO)-32, Engine Control Module (ECM).>

	Step	Check	Yes	No
12	**CHECK HARNESS.** 1) Connect the control module connectors except body integrated unit. 2) Connect the tester to vehicle side harness. 3) Turn the ignition switch to ON, and measure the terminal voltage. ***Connector & terminal*** ***(B280) No. 20 — Chassis ground:***	Is the voltage more than 6 V?	Go to step **13**.	Go to step **14**.
13	**CHECK CONTROL MODULE.** Disconnect each control module connector one by one with the tester connected to vehicle side harness.	Is there any module which its voltage changes to less than 6 V?	Replace the module which its voltage changes.	Repair or replace the short circuit of the harness.
14	**CHECK HARNESS.** 1) Connect the control module connectors except body integrated unit connector. 2) Connect the tester between vehicle side harness and chassis ground, and measure the resistance. ***Connector & terminal*** ***(B280) No. 20 — Chassis ground:*** ***(B280) No. 30 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **15**.	Repair or replace the short circuit of the harness.
15	**CHECK CONTROL MODULE.** Disconnect each control module connector one by one with the tester connected to vehicle side harness.	Is there any module which its resistance changes to more than 10 Ω?	Replace the module which its resistance changes to more than 10 Ω.	Repair or replace the short circuit of the harness.
16	**CHECK CONTROL MODULE.** 1) Connect all the control module connectors. 2) Connect the Subaru Select Monitor and perform the clear memory. 3) Disconnect the TCM connector (B54). 4) Turn the ignition switch to ON and read the DTC of body integrated unit. <Ref. to LAN(diag)-12, OPERATION, Subaru Select Monitor.>	Is DTC B0201 displayed?	Go to step **17**.	Replace the TCM. <Ref. to 5AT-56, REMOVAL, Transmission Control Module (TCM).>
17	**CHECK CONTROL MODULE.** 1) Connect the TCM control module connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Disconnect the steering angle sensor connector (B231). 4) Turn the ignition switch to ON and read the DTC of body integrated unit. <Ref. to LAN(diag)-12, OPERATION, Subaru Select Monitor.>	Is DTC B0201 displayed?	Go to step **18**.	Replace the steering angle sensor. <Ref. to VDC-19, REPLACEMENT, Steering Angle Sensor.>
18	**CHECK CONTROL MODULE.** 1) Connect the steering angle sensor connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Disconnect the yaw rate sensor connector (B359). 4) Turn the ignition switch to ON and read the DTC of body integrated unit. <Ref. to LAN(diag)-12, OPERATION, Subaru Select Monitor.>	Is DTC B0201 displayed?	Go to step **19**.	Replace the yaw rate sensor. <Ref. to VDC-18, REMOVAL, Yaw Rate & Lateral G Sensor.>

	Step	Check	Yes	No
19	**CHECK CONTROL MODULE.** 1) Connect all the control module connectors. 2) Check the data of “body integrated unit data received” on the current data display of ECM using Subaru Select Monitor.	Is the “Yes” displayed?	Go to step **20**.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
20	**CHECK CONTROL MODULE.** Check the data of “body integrated unit counter update” on the data display of ECM.	Is the “Yes” displayed?	Replace the ECM. <Ref. to FU(H6DO)-32, Engine Control Module (ECM).>	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>

J: DTC B0202 CAN-HS BUS OFF

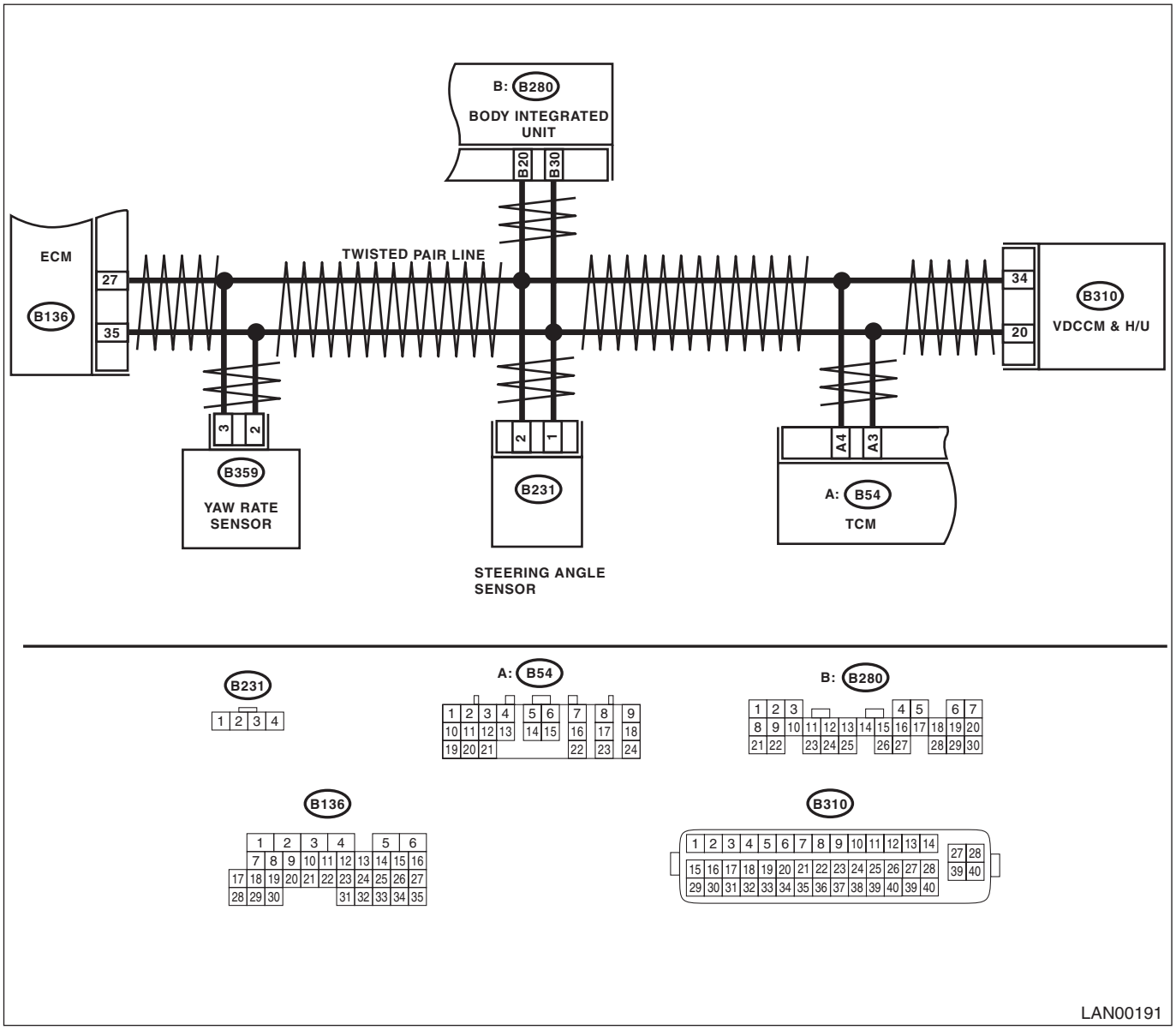
DTC DETECTING CONDITION:

- Find the unit or CAN line in which trouble occurs, and repair and replace it.
- Not received data and error data may be detected at the same time.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK TCM.** 1) Disconnect the TCM connector (B54). 2) Clear the memory of the body integrated unit. <Ref. to LAN(diag)-21, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.> 3) Read DTC of body integrated unit.	Is DTC (B0202) displayed?	Go to step **2**.	Replace the TCM. <Ref. to 5AT-56, Transmission Control Module (TCM).>

	Step	Check	Yes	No
2	**CHECK STEERING ANGLE SENSOR.** 1) Disconnect the steering angle sensor connector (B231). 2) Perform the clear memory mode of body integrated unit. <Ref. to LAN(diag)-21, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.> 3) Read DTC of body integrated unit.	Is DTC (B0202) displayed?	Go to step **3**.	Replace the steering angle sensor. <Ref. to VDC-19, REPLACEMENT, Steering Angle Sensor.>
3	**CHECK YAW RATE SENSOR** 1) Disconnect the yaw rate sensor connector (B359). 2) Perform the clear memory mode of body integrated unit. 3) Read DTC of body integrated unit.	Is DTC (B0202) displayed?	Go to step **4**.	Replace the yaw rate sensor. <Ref. to VDC-18, REMOVAL, Yaw Rate & Lateral G Sensor.>
4	**CHECK THE BODY INTEGRATED UNIT.** 1) Disconnect the body integrated unit connector (B280). 2) Read the data between VDC/ABSCM and ECM. Check item: • Engine speed • Average front wheel speed (value on constant driving)	Engine speed and front wheel speed are correctly communicated. (Appears same value)	Replace the body integrated unit. <Ref. to SL-52, Body Integrated Unit.>	Go to step **5**.
5	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance between 55 — 65 Ω?	Go to step **11**.	Go to step **6**.
6	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance between 115 — 125 Ω?	Go to step **8**.	Go to step **7**.
7	**CHECK HARNESS.** 1) Disconnect the harness connector of body integrated unit. 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance more than 30 MΩ?	Open circuit in related line of body integrated unit. Repair the open circuit of harness or replace harness.	Go to step **8**.
8	**CHECK HARNESS.** 1) Disconnect the VDC CM (B310) connector. 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B310) No. 13 — No. 29:***	Is the resistance between 115 — 125 Ω?	Go to step **9**.	Go to step **10**.
9	**CHECK VDC CM.** 1) Disconnect the VDC CM (B310) connector. 2) Measure the resistance between VDC CM terminals. ***Connector & terminal*** ***(B310) No. 20 — No. 34:***	Is the resistance between 115 — 125 Ω?	Go to step **10**.	Open circuit in end resistance of VDC CM. Replace the VDC CM. <Ref. to VDC-7, VDC Control Module & Hydraulic Control Unit (VDCCM&H/U).>

	Step	Check	Yes	No
10	**CHECK ECM.** 1) Disconnect the ECM connector (B136). 2) Measure the resistance between ECM connector terminals. ***Connector & terminal*** ***(B136) No. 27 — No. 35:***	Is the resistance between 115 — 125 Ω?	Repair or replace the open circuit of harness connector.	Open circuit in end resistance of ECM. Replace the ECM. <Ref. to FU(H6DO)-32, Engine Control Module (ECM).>
11	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(B280) No. 20 — Chassis ground:*** ***(B280) No. 30 — Chassis ground:***	Is the resistance less than 10 Ω?	Repair or replace the ground short circuit of the harness.	Go to step **12**.
12	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(B280) No. 20 (+) — Chassis ground (–):*** ***(B280) No. 30 (+) — Chassis ground (–):***	Is the voltage more than 6 V?	Repair the short circuit of harness or replace harness.	Go to step **13**.
13	**CHECK DTC.** Read the DTC of ECM using Subaru Select Monitor. <Ref. to EN(H6DO)(diag)-34, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC other than “CAN communication” displayed?	Perform the diagnosis according to DTC.	Go to step **14**.
14	**CHECK DTC.** Read the DTC of VDC CM using Subaru Select Monitor. <Ref. to VDC(diag)-16, READ DIAGNOSTIC TROUBLE CODE (DTC), OPERATION, Subaru Select Monitor.>	Is DTC other than “CAN communication” or “C0057” displayed?	Perform the diagnosis according to DTC.	Go to step **15**.
15	**CHECK DTC.** Read the DTC of TCM using Subaru Select Monitor. <Ref. to 5AT(diag)-15, OPERATION, Subaru Select Monitor.>	Is DTC other than “CAN communication” displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>

K: DTC B0211 CAN-HS ECM DATA ABNORMAL

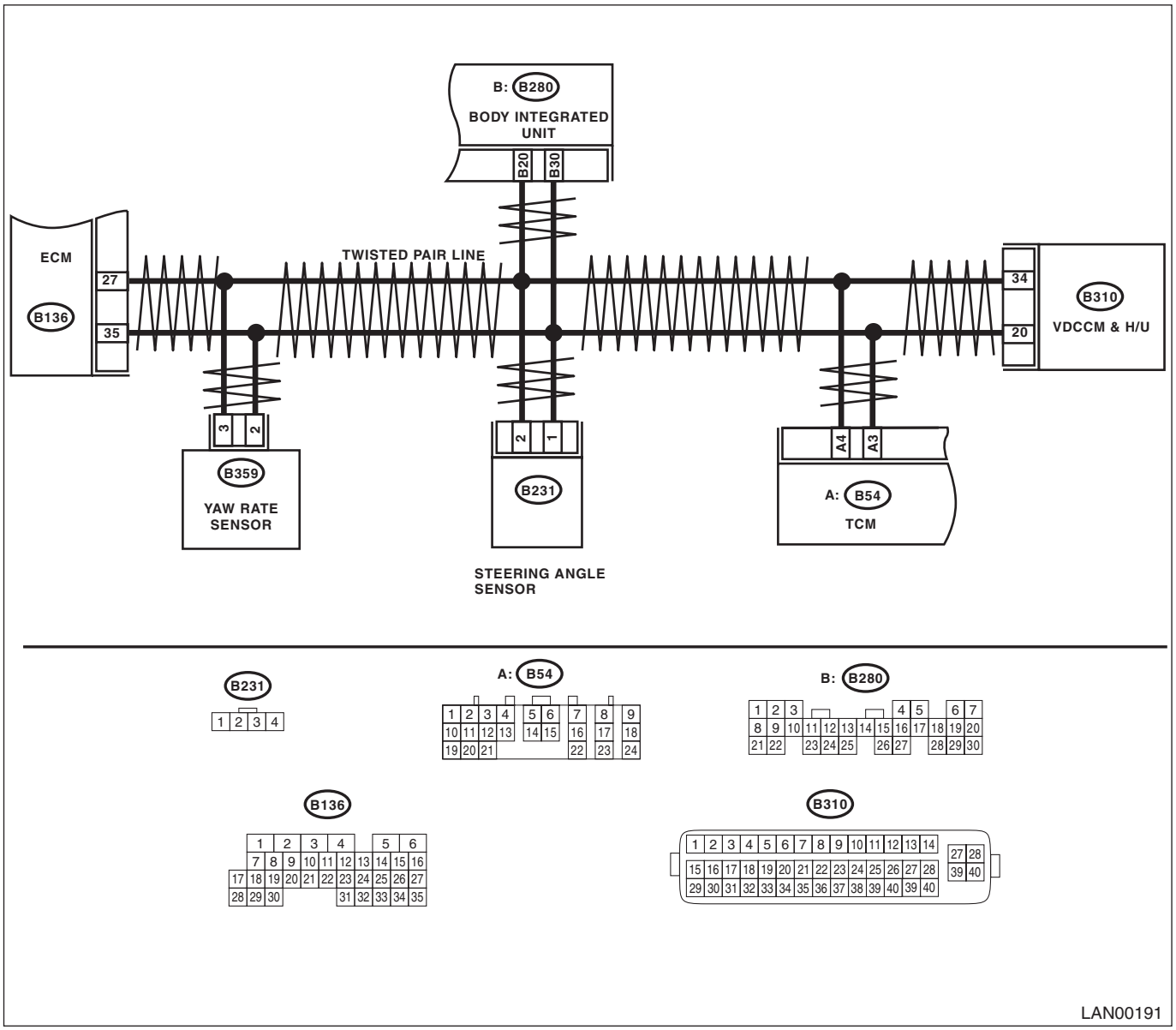
DTC DETECTING CONDITION:

Defective data from ECM.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK ECM.** Read the DTC of ECM using Subaru Select Monitor. <Ref. to EN(H6DO)(diag)-34, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC other than "CAN communication" displayed?	Perform the diagnosis according to DTC.	Replace the ECM. <Ref. to FU(H6DO)-32, Engine Control Module (ECM).>

L: DTC B0212 CAN-HS TCM DATA ABNORMAL

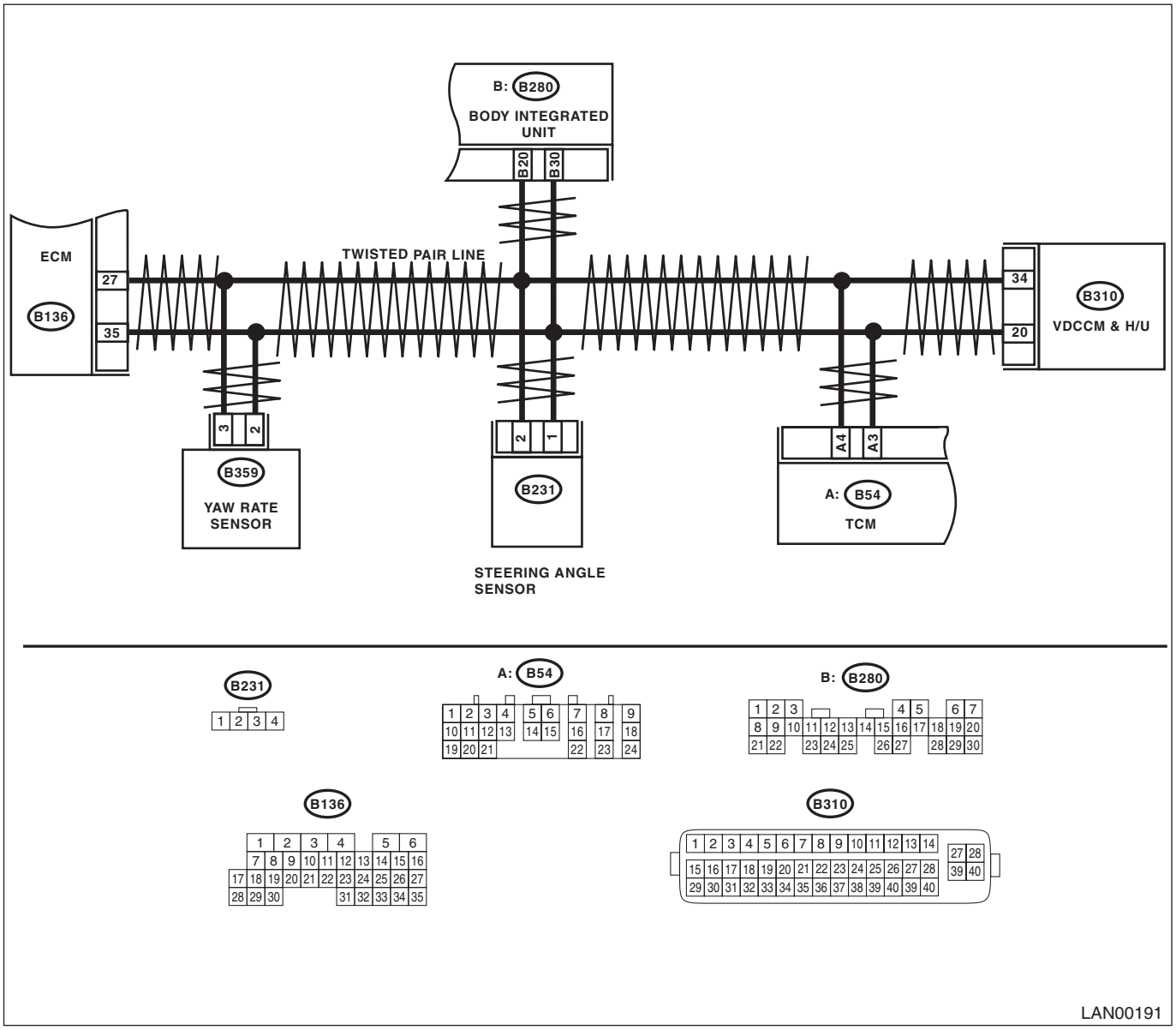
DTC DETECTING CONDITION:

TCM has error, harness between the main harness splice and TCM is open or shorted, connectors are not connected securely, or the terminal has poor caulking.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK TCM.** Read the DTC of TCM using Subaru Select Monitor. <Ref. to 5AT(diag)-15, OPERATION, Subaru Select Monitor.>	Is DTC other than "CAN communication" displayed?	Perform the diagnosis according to DTC.	Replace the TCM. <Ref. to 5AT-56, Transmission Control Module (TCM).>

M: DTC B0213 CAN-HS VDC/ABS DATA ABNORMAL

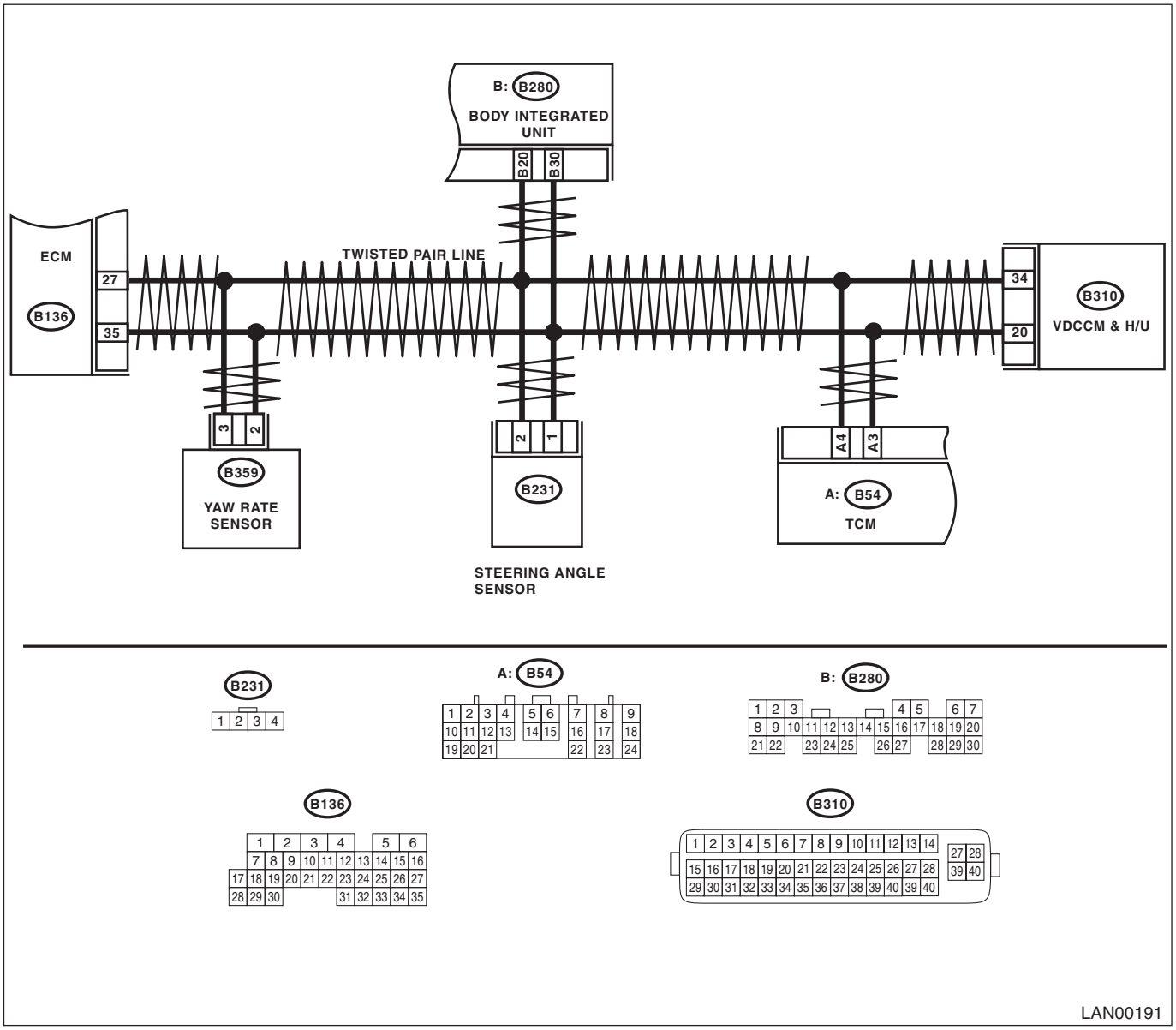
DTC DETECTING CONDITION:

VDC CM body has error, the main harness is open or shorted, the connector is not connected properly, or the terminal has poor caulking.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK VDC CM.** Read the DTC of VDC CM using Subaru Select Monitor.	Is DTC other than “CAN communication” displayed?	Perform the diagnosis according to DTC.	Replace the VDC CM. <Ref. to VDC-7, VDC Control Module & Hydraulic Control Unit (VDCCM&H/U).>

N: DTC B0221 CAN-HS ECM NO-RECEIVE DATA

DTC DETECTING CONDITION:

Defective ECM. (If error is in the main harness, DTC P0600 CAN communication link is input simultaneously.)

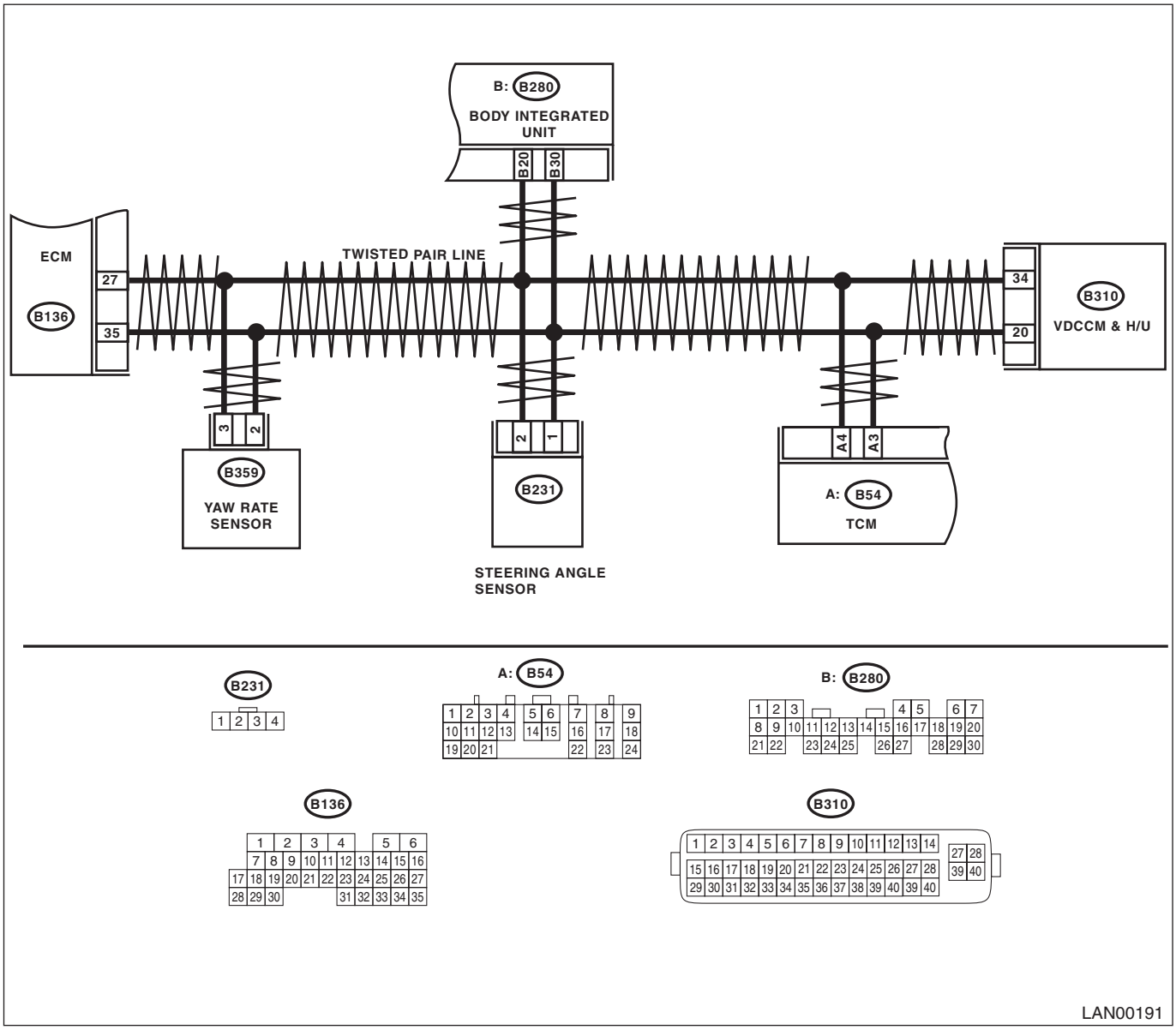
NOTE:

When more than two DTCs are displayed. <Ref. to LAN(diag)-31, DTC TABLE, List of Diagnostic Trouble Code (DTC).>

TROUBLE SYMPTOM:

- Malfunction indicator light illuminates.
- “Er HC” is displayed in odo/trip meter.
- P1718 (TCM) and C0057 (VDC CU) are output.

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between harness connectors. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance 55 — 65 Ω? (Specification 60 Ω)	Read the DTC of ECM. Perform the diagnosis according to DTC. <Ref. to EN(H6DO)(diag)-26, READ DIAGNOSTIC TROUBLE CODE (DTC) FOR ENGINE (NORMAL MODE), OPERATION, Subaru Select Monitor.>	Go to step **2**.
2	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280). 2) Measure the resistance between harness connectors. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance 115 — 125Ω? (End resistance or main wiring harness is open.)	Go to step **3**.	Related line of body integrated unit is open when ∞ Ω. Repair the open circuit of harness or replace harness.
3	**CHECK HARNESS.** 1) Disconnect the ECM connector (B136). 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B136) No. 27 — No. 35:***	Is the resistance 115 — 125 Ω? (End resistance specification 120 Ω)	Go to step **4**.	Go to step **5**.
4	**CHECK ECM.** 1) Disconnect the ECM connector (B136). 2) Measure the resistance between ECM terminals. ***Connector & terminal*** ***(B136) No. 27 — No. 35:***	Is the resistance between 115 — 125 Ω?	Read the DTC of ECM. Perform the diagnosis according to DTC. <Ref. to EN(H6DO)(diag)-26, READ DIAGNOSTIC TROUBLE CODE (DTC) FOR ENGINE (NORMAL MODE), OPERATION, Subaru Select Monitor.>	End resistance is open. Replace the ECM. <Ref. to FU(H6DO)-32, Engine Control Module (ECM).>
5	**CHECK HARNESS.** 1) Disconnect the ECM connector (B137). 2) Measure the resistance between harness connector and chassis ground. ***Connector & terminal*** ***(B136) No. 27 — Chassis ground:*** ***(B136) No. 35 — Chassis ground:***	Is the resistance less than 10 Ω?	Repair the short circuit of harness or replace harness.	Go to step **6**.

	Step	Check	Yes	No
6	**CHECK HARNESS.** 1) Disconnect the body integrated unit (B280), ECM (B136), TCM (B54), VDC CU (B310) and Yaw rate sensor (B359) connectors. 2) Measure the voltage between harness connector and chassis ground while turning the ignition switch to ON. ***Connector & terminal*** ***(B280) No. 20 (+) — Chassis ground (–):*** ***(B280) No. 30 (+) — Chassis ground (–):***	Is the voltage more than 6 V?	Repair or replace the short circuit of the harness.	Read the DTC of ECM. Perform the diagnosis according to DTC. <Ref. to EN(H6DO)(diag)-26, READ DIAGNOSTIC TROUBLE CODE (DTC) FOR ENGINE (NORMAL MODE), OPERATION, Subaru Select Monitor.>

O: DTC B0222 CAN-HS TCM NO-RECEIVE DATA

DTC DETECTING CONDITION:

TCM has error, harness between the main harness splice and TCM is open or shorted, connectors are not connected securely, or the terminal has poor caulking.

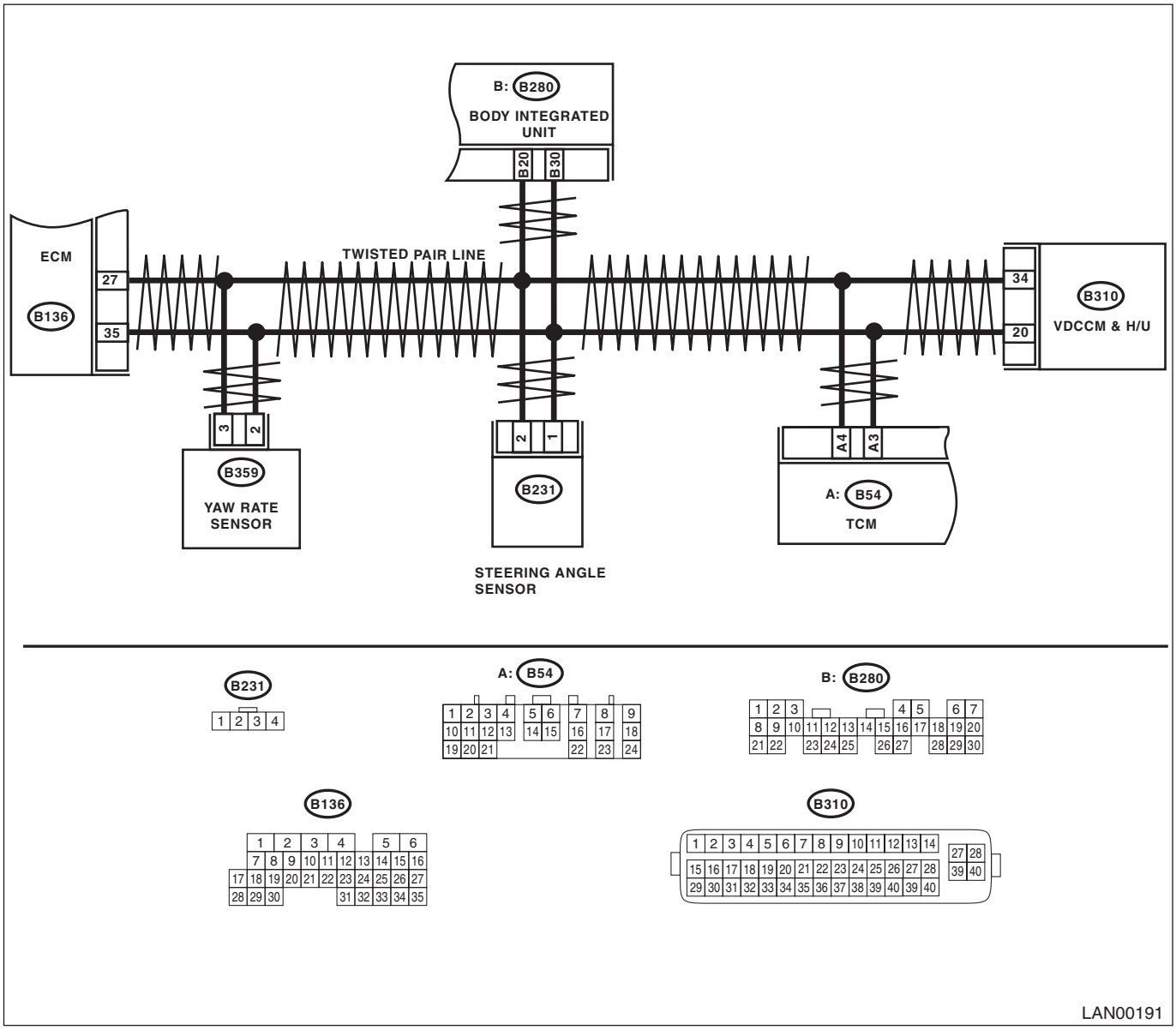
NOTE:

When more than two DTCs are displayed. <Ref. to LAN(diag)-31, DTC TABLE, List of Diagnostic Trouble Code (DTC).>

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK HARNESS.** 1) Disconnect the TCM connector (B54). 2) Measure the resistance between harness connector terminals. ***Connector & terminal (B54) No. 3 — No. 4:***	Is the resistance ∞ Ω?	Open circuit in related lines of TCM. Repair the open circuit of harness or replace harness.	Go to step **2**.
2	**CHECK TCM.** Read the DTC of TCM using Subaru Select Monitor. <Ref. to 5AT(diag)-15, OPERATION, Subaru Select Monitor.>	Is DTC other than “CAN communication” displayed?	Perform the diagnosis according to DTC.	Replace the TCM. <Ref. to 5AT-56, Transmission Control Module (TCM).>

P: DTC B0223 CAN-HS VDC/ABS NO-RECEIVE DATA

DTC DETECTING CONDITION:

Defective VDC CM. (If error is in the main harness, DTC P0600 High-speed CAN circuit is input at the same time.)

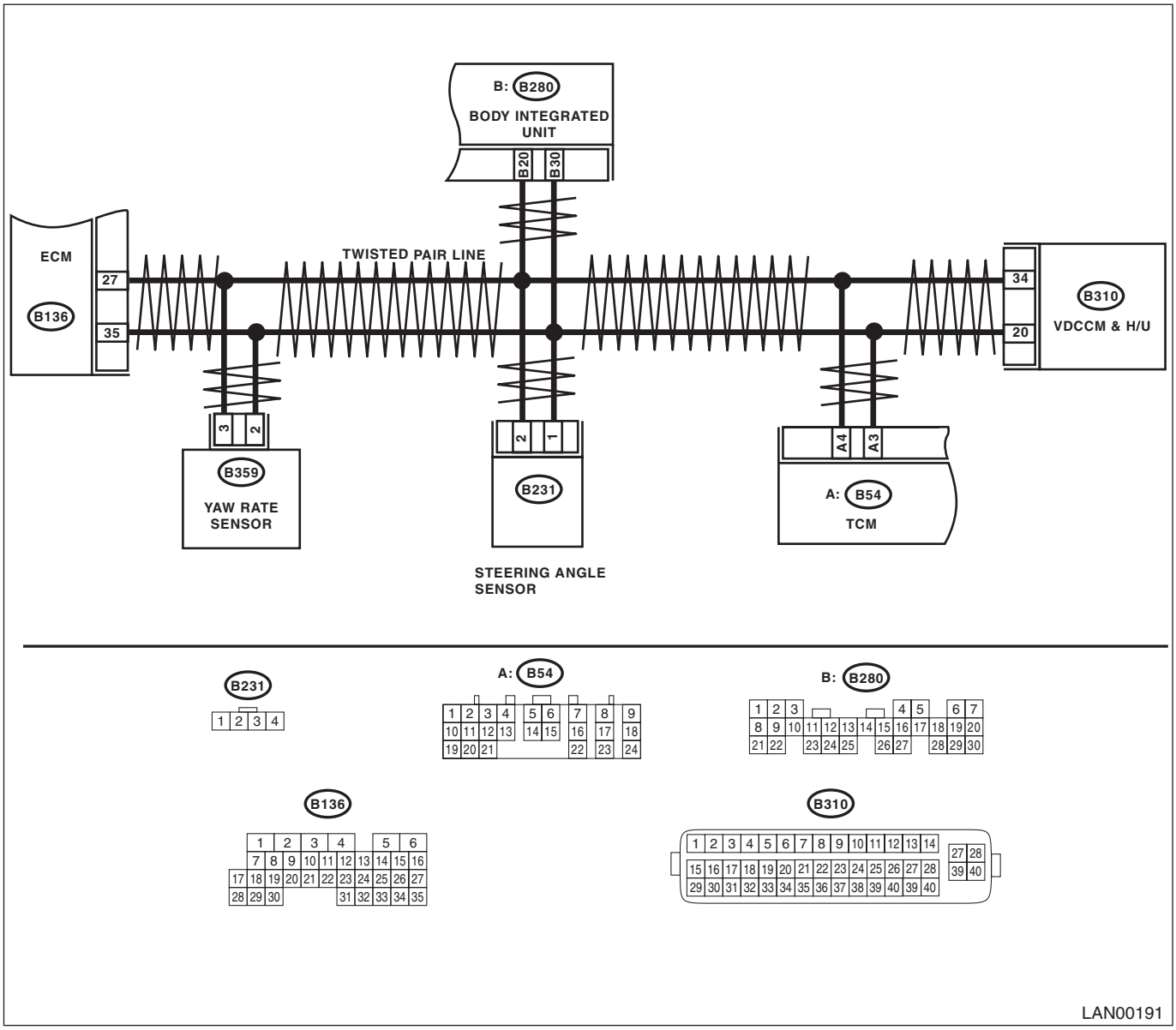
NOTE:

When more than two DTCs are displayed. <Ref. to LAN(diag)-31, DTC TABLE, List of Diagnostic Trouble Code (DTC).>

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK HARNESS.** 1) Disconnect the harness connector of body integrated unit. 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance between 55 — 65 Ω?	Read the DTC of VDC CM, and perform the diagnosis according to DTC.	Go to step **2**.
2	**CHECK HARNESS.** 1) Disconnect the harness connector of body integrated unit. 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B280) No. 20 — No. 30:***	Is the resistance between 115 — 125 Ω?	Go to step **5**.	Go to step **3**.
3	**CHECK HARNESS.** 1) Disconnect the harness connector of body integrated unit. 2) Measure the resistance between harness connector terminal and chassis ground. ***Connector & terminal*** ***(B280) No. 20 — Chassis ground:*** ***(B280) No. 30 — Chassis ground:***	Is the resistance ∞ Ω?	Open circuit in related line of body integrated unit. Repair the open circuit of harness or replace harness.	Go to step **4**.
4	**CHECK HARNESS.** 1) Disconnect the harness connector of body integrated unit. 2) Measure the voltage between harness connector terminal and chassis ground. (Ignition switch ON) ***Connector & terminal*** ***(B280) No. 20 (+) — Chassis ground (–):*** ***(B280) No. 30 (+) — Chassis ground (–):***	Is the voltage more than 6 V?	Repair the short circuit of harness or replace harness.	Go to step **5**.
5	**CHECK END RESISTANCE.** 1) Disconnect the VDC CM harness connector. 2) Measure the resistance between VDC CM connector terminals. ***Connector & terminal*** ***(B310) No. 20 — No. 34:***	Is the resistance between 115 — 125 Ω?	Go to step **6**.	End resistance is open. Replace the VDC CM. <Ref. to VDC-7, VDC Control Module & Hydraulic Control Unit (VDCCM&H/U).>
6	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280) and VDC CM connector (B310). 2) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B310) No. 13 — (B280) No. 20:*** ***(B310) No. 29 — (B280) No. 30:***	Is the resistance less than 10 Ω?	Go to step **7**.	Main wiring harness is open. Repair the open circuit of harness or replace harness.
7	**CHECK VDC CM.** 1) Connect all the connectors. 2) Read the DTC of VDC CM using Subaru Select Monitor.	Is DTC other than “CAN communication” displayed?	Perform the diagnosis according to DTC concerning VDC CM.	Replace the VDC CM. <Ref. to VDC-7, VDC Control Module & Hydraulic Control Unit (VDCCM&H/U).>

Q: DTC B0300 CAN-LS MALFUNCTION

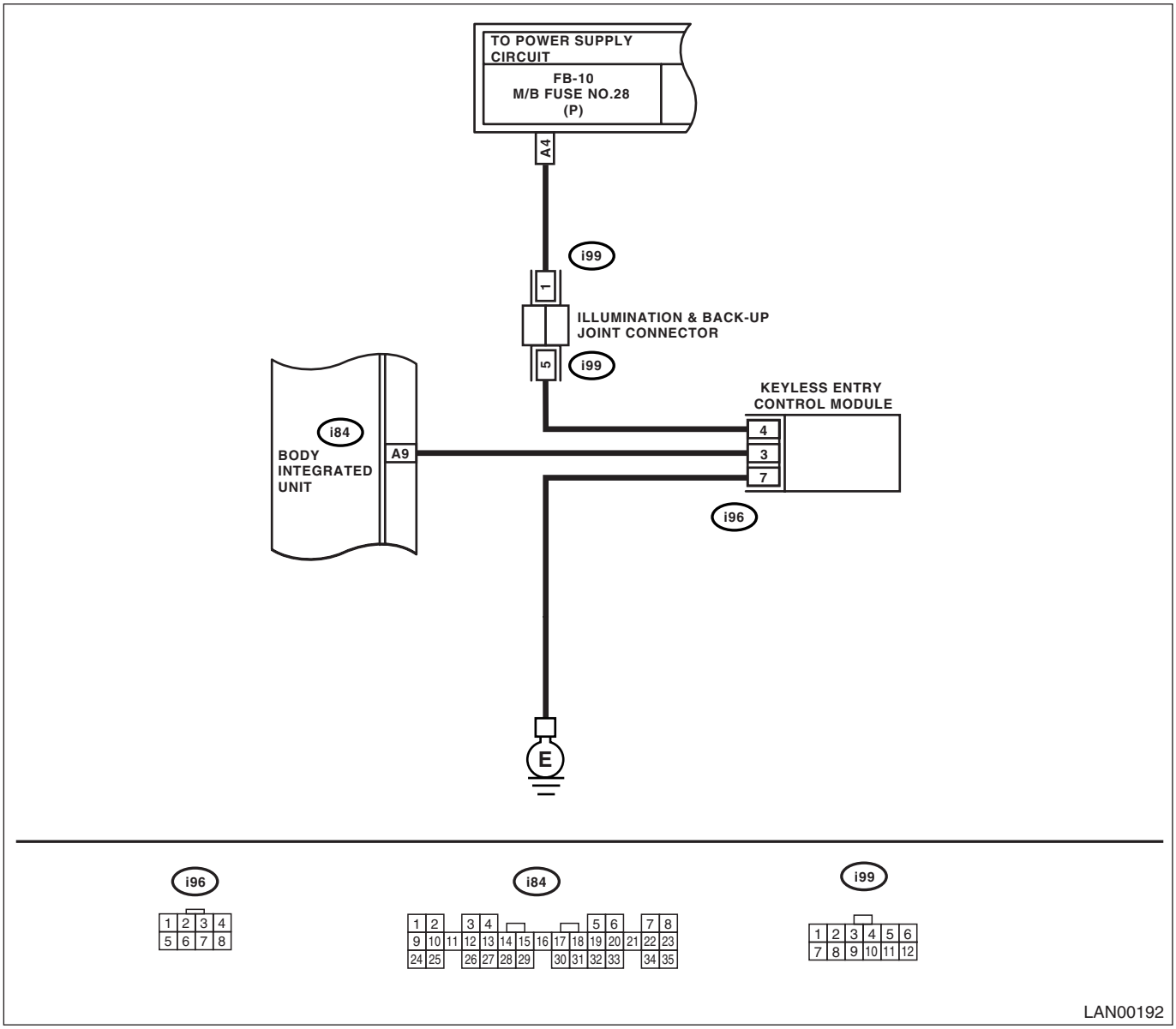
DTC DETECTING CONDITION:

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

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK HARNESS.** 1) Disconnect the CAN junction connector (i128) and body integrated unit connector (i84). 2) Measure the resistance between connector terminals. ***Connector & terminal*** ***(i84) No. 26 — (i128) No. 7 to 12:*** ***(i84) No. 27 — (i128) No. 1 to 6:*** NOTE: The i128 junction connector is freely arranged.	Is the resistance less than 10 Ω?	Go to step **2**.	Repair the short circuit of harness or replace harness.

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Disconnect the combination meter connector. 2) Measure the resistance between junction connector and combination meter connector. ***Connector & terminal*** ***(i10) No. A29 — (i77) No. 1 to 6:*** ***(i10) No. A30 — (i77) No. 7 to 12:***	Is the resistance less than 10 Ω?	Go to step **3**.	Repair the open circuit of harness or replace harness.
3	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (B280) and Auto A/C control module connector (B283). 2) Measure the resistance 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 resistance less than 10 Ω?	Go to step **4**.	Repair the open circuit of harness or replace harness.
4	**CHECK HARNESS.** 1) Connect the junction connector. 2) Measure the resistance between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(B280) No. 25 — Chassis ground:*** ***(B280) No. 26 — Chassis ground:*** ***(i84) No. 26 — Chassis ground:*** ***(i84) No. 27 — Chassis ground:***	Is the resistance less than 10 Ω?	Repair the short circuit of harness or replace harness.	Go to step **5**.
5	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(B280) No. 25 (+) — Chassis ground (–):*** ***(B280) No. 26 (+) — Chassis ground (–):*** ***(i84) No. 26 (+) — Chassis ground (–):*** ***(i84) No. 27 (+) — Chassis ground (–):***	Is the voltage more than 6 V?	Repair the short circuit of harness or replace harness.	Go to step **6**.
6	**CHECK AUTO A/C.** Perform the auto A/C self-diagnosis. <Ref. to AC(diag)-13, A/C CONTROL SYSTEM SELF-DIAGNOSIS, OPERATION, Diagnostic Chart for Self-diagnosis.>	Is the self-diagnosis OK?	Go to step **7**.	Replace the auto A/C control module. <Ref. to AC-32, REMOVAL, Control Unit (Auto A/C Model).>
7	**CHECK COMBINATION METER.** 1) Connect all the connectors. 2) Turn the ignition switch to ON. 3) Check the display of combination meter, odo/trip.	Is “Er SS” and “Er SP” displayed?	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>	Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>

R: DTC B0301 CAN-LS COUNTER ABNORMAL

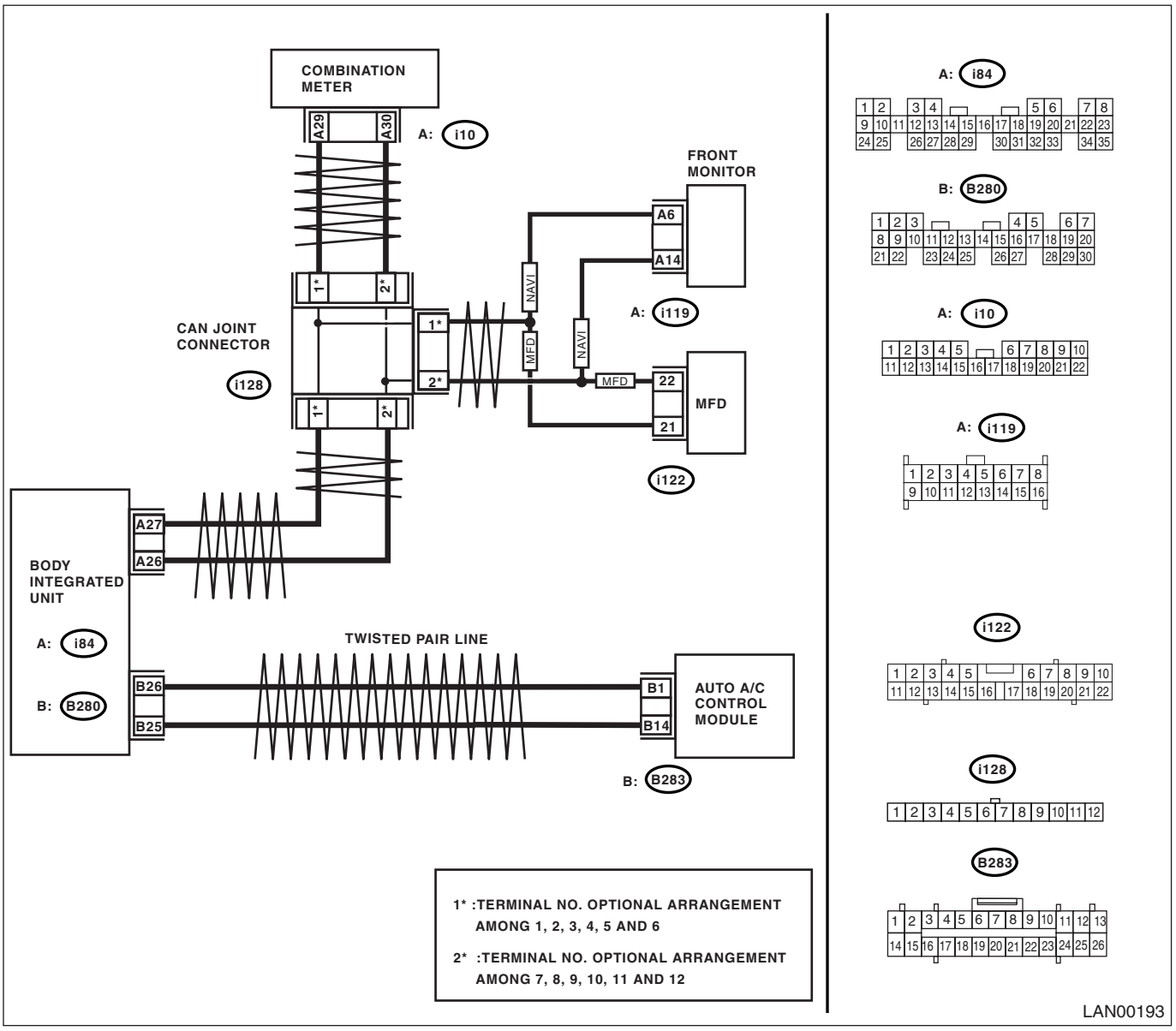
DTC DETECTING CONDITION:

Find the unit in which trouble occurs and open or short CAN line, and repair and replace them.
(Free running counter error may be detected at the same time from the unit in which malfunction occurs.)

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK AUTO A/C CONTROL MODULE.** 1) Display the current data of body integrated unit using Subaru Select Monitor. 2) Display the number of blower fan levels in the analog data. 3) Read the data display when the number of blower fan levels is changed on air conditioner control part.	Does the data display change?	Go to step **2**.	Go to step **3**.

	Step	Check	Yes	No
2	**CHECK COMBINATION METER.** 1) Display the current data of body integrated unit using Subaru Select Monitor. 2) Display the door switch in analog data. 3) Read the display of data and combination meter when each door is opened/closed.	Do the body integrated unit data indicator and combination meter indicator change according to operation?	Go to step **3**.	Go to step **4**.
3	**CHECK AUTO A/C CONTROL MODULE HARNESS.** 1) Disconnect the auto A/C control module connector. 2) Disconnect the body integrated unit connector. 3) Measure the resistance of harness between body integrated unit and auto A/C control module. ***Connector & terminal*** ***(B280) No. 26 — (D283) No. 1:*** ***(B280) No. 25 — (D283) No. 14:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair the open circuit of harness or replace harness.
4	**CHECK COMBINATION METER HARNESS.** 1) Disconnect the combination meter connector. 2) Disconnect the body integrated unit connector. 3) Measure the resistance between body integrated unit and combination meter connector. ***Connector & terminal*** ***(i84) No. 26 — (i10) No. 30:*** ***(i84) No. 27 — (i10) No. 29:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair the open circuit of harness or replace harness.
5	**CHECK AUTO A/C CONTROL MODULE.** Perform the auto A/C control module self-diagnosis. <Ref. to AC(diag)-13, A/C CONTROL SYSTEM SELF-DIAGNOSIS, OPERATION, Diagnostic Chart for Self-diagnosis.>	Is the self-diagnosis OK?	Go to step **6**.	Replace the auto A/C control module. <Ref. to AC-32, REMOVAL, Control Unit (Auto A/C Model).>
6	**CHECK COMBINATION METER.** Perform the self-diagnosis for combination meter system. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>	Is the self-diagnosis OK?	Go to step **7**.	Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>
7	**CHECK THE BODY INTEGRATED UNIT.** Read the data of “body integrated unit data received” on ECM data display using Subaru Select Monitor.	Is “Yes” displayed?	Go to step **8**.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
8	**CHECK THE BODY INTEGRATED UNIT.** Read the data of “body integrated unit counter update” on ECM data display using Subaru Select Monitor.	Is “Yes” displayed?	Temporary poor contact occurs. Check the connection of connector.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>

S: DTC B0302 CAN-LS BUS OFF

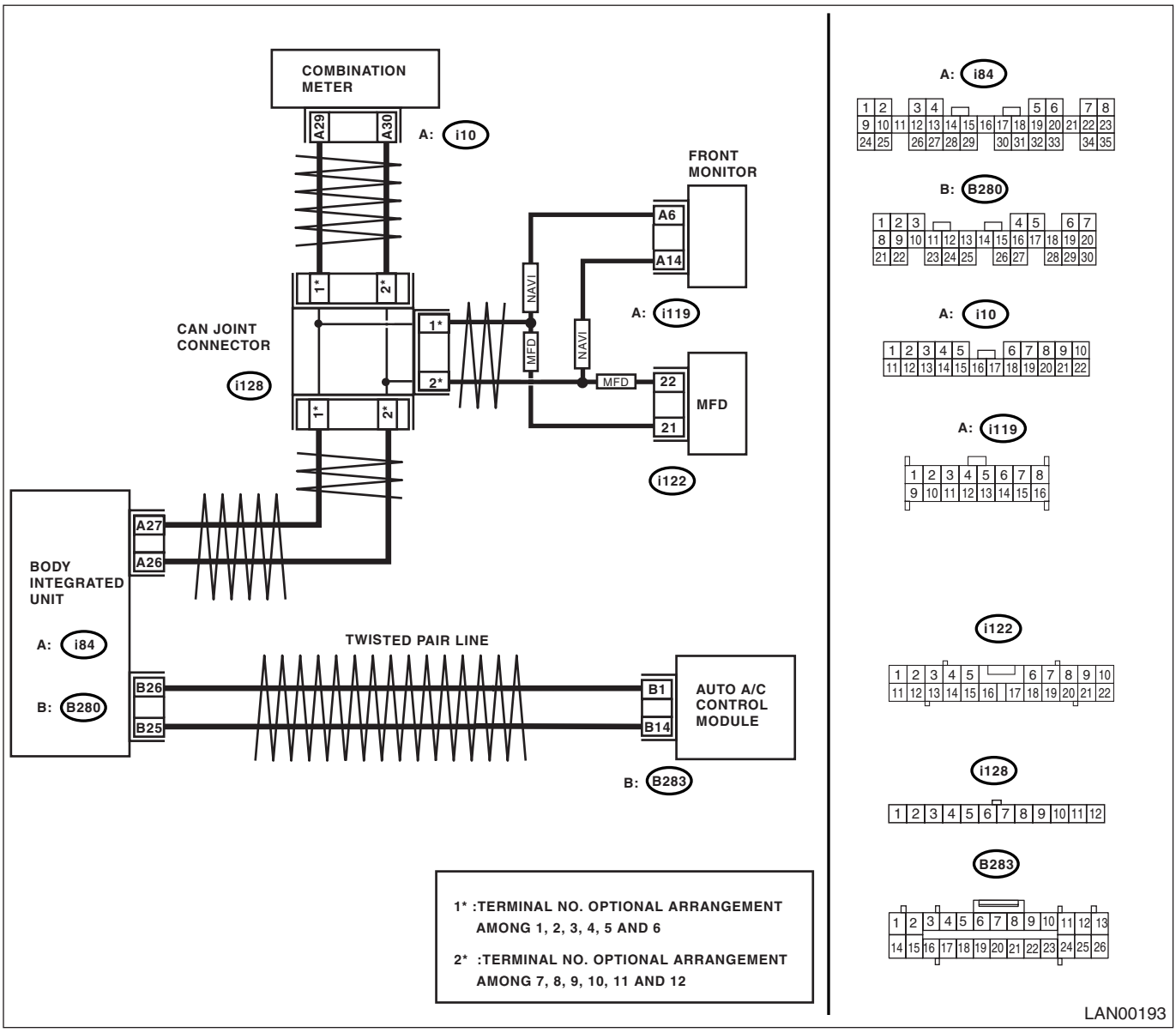
DTC DETECTING CONDITION:

Because of a lot of error data occurred, some units have been disconnected not to affect other units. Communication error from the unit in which error is occurred is input at the same time.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK AUTO A/C CONTROL MODULE.** 1) Display the current data of body integrated unit using Subaru Select Monitor. 2) Display the number of blower fan levels in the analog data. 3) Read the data display when the number of blower fan levels is changed on air conditioner control part.	Does the data display change?	Go to step **2**.	Go to step **3**.

	Step	Check	Yes	No
2	**CHECK COMBINATION METER.** 1) Display the current data of body integrated unit using Subaru Select Monitor. 2) Display the door switch in analog data. 3) Read the display of data and combination meter when each door is opened/closed.	Do the body integrated unit data indicator and combination meter indicator change according to operation?	Go to step **3**.	Go to step **4**.
3	**CHECK AUTO A/C CONTROL MODULE HARNESS.** 1) Disconnect the auto A/C control module connector. 2) Disconnect the body integrated unit connector. 3) Measure the resistance of harness between body integrated unit and auto A/C control module. ***Connector & terminal*** ***(B280) No. 26 — (D283) No. 1:*** ***(B280) No. 25 — (D283) No. 14:***	Is the resistance less than 10 Ω?	Go to step **5**.	Repair the open circuit of harness or replace harness.
4	**CHECK COMBINATION METER HARNESS.** 1) Disconnect the combination meter connector. 2) Disconnect the body integrated unit connector. 3) Measure the resistance between body integrated unit and combination meter connector. ***Connector & terminal*** ***(i84) No. 26 — (i10) No. 29:*** ***(i84) No. 27 — (i10) No. 30:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair the open circuit of harness or replace harness.
5	**CHECK AUTO A/C CONTROL MODULE.** Perform the auto A/C control module self-diagnosis. <Ref. to AC(diag)-13, A/C CONTROL SYSTEM SELF-DIAGNOSIS, OPERATION, Diagnostic Chart for Self-diagnosis.>	Is the self-diagnosis OK?	Go to step **6**.	Replace the auto A/C control module. <Ref. to AC-32, REMOVAL, Control Unit (Auto A/C Model).>
6	**CHECK COMBINATION METER.** Perform the self-diagnosis for combination meter system. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>	Is the self-diagnosis OK?	Go to step **7**.	Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>
7	**CHECK THE BODY INTEGRATED UNIT.** Read the data of “body integrated unit data received” on ECM data display using Subaru Select Monitor.	Is “Yes” displayed?	Go to step **8**.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
8	**CHECK THE BODY INTEGRATED UNIT.** Read the data of “body integrated unit counter update” on ECM data display using Subaru Select Monitor.	Is “Yes” displayed?	Connect all the connectors, and make sure same DTC is not displayed.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>

T: DTC B0311 CAN-LS METER UNIT DATA ABNORMAL

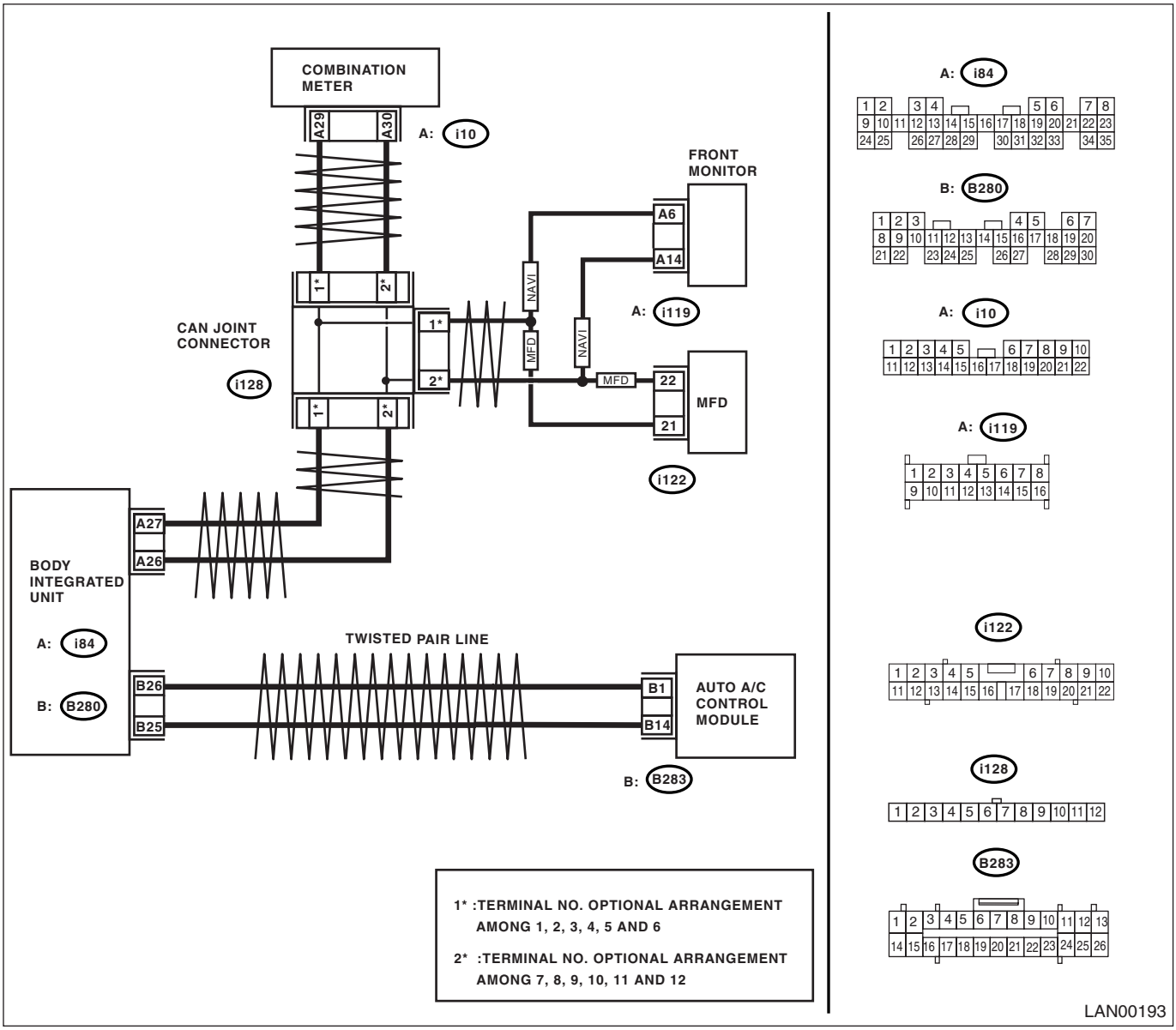
DTC DETECTING CONDITION:

Combination meter has error, the harness between main harness splice and combination meter is open or shorted, the connector is not connected properly, or the terminal has poor caulking.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK COMBINATION METER.** Perform the self-diagnosis of combination meter. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>	Is the self-diagnosis OK?	Read the DTC again, and then perform the diagnosis according to DTC displayed on the top.	Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>

U: DTC B0313 CAN-LS MONITOR DATA ABNORMAL

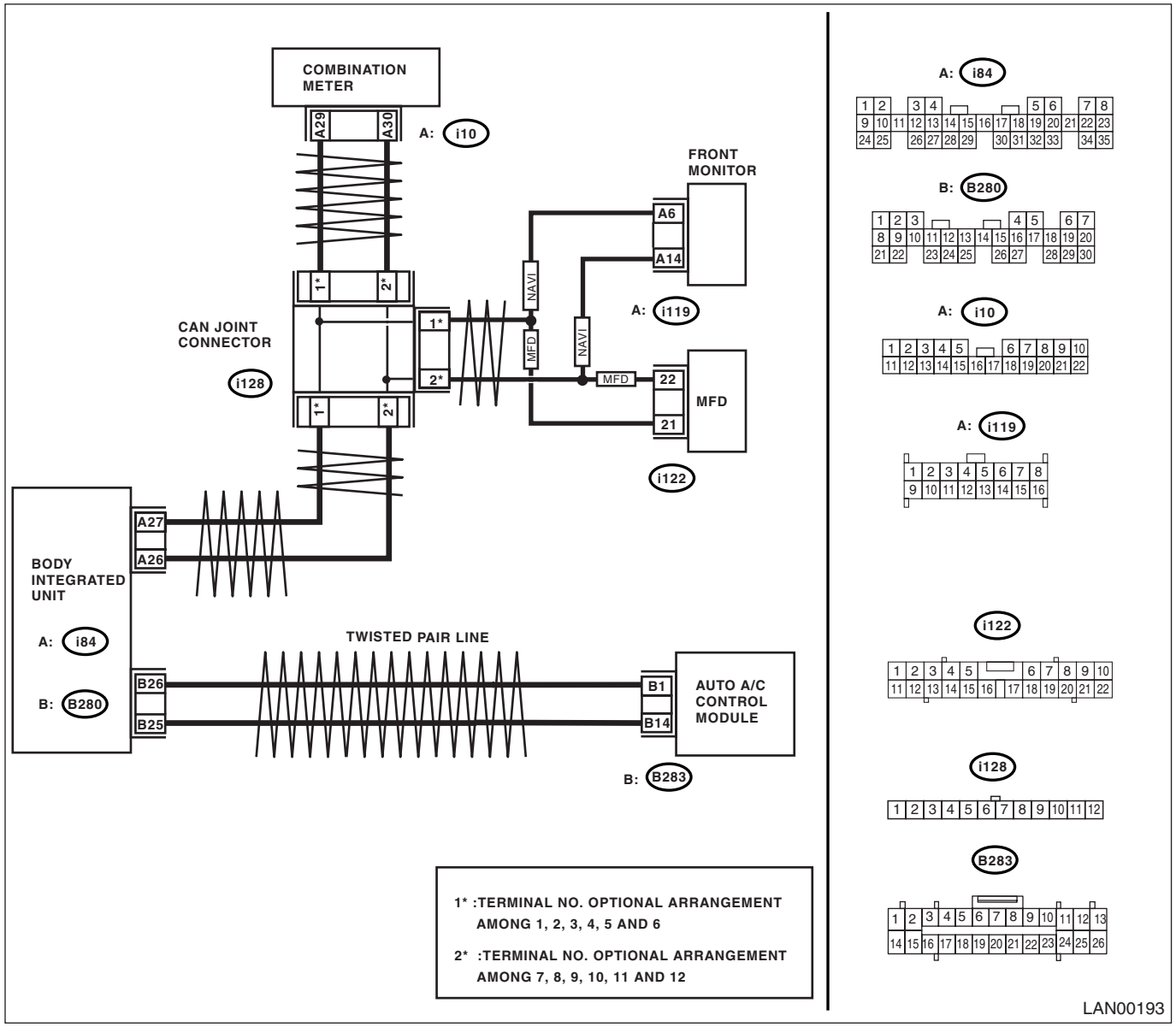
DTC DETECTING CONDITION:

Center display unit error, or harness between the main harness splice and center display unit is open or shorted, the connector is not connected securely and the terminal has poor caulking.

TROUBLE SYMPTOM:

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

WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK SUBARU SELECT MONITOR.** 1) Display the current data of body integrated unit using Subaru Select Monitor. 2) Display center monitor display fail.	Is OK displayed?	Go to step **2**.	Refer to MFD or navigation display. <Ref. to ET-22, REMOVAL, Navigation Display.> <Ref. to ET-26, REMOVAL, Multi Function Display (MFD).>
2	**CHECK NAVIGATION.** 1) Display the current data of body integrated unit using Subaru Select Monitor. 2) Display NAVI fail.	Is OK displayed?	Refer to MFD or navigation display. <Ref. to ET-22, REMOVAL, Navigation Display.> <Ref. to ET-26, REMOVAL, Multi Function Display (MFD).>	Refer to navigation body. <Ref. to ET-23, REMOVAL, Navigation Body.>

V: DTC B0321 CAN-LS METER NO-RECEIVE DATA

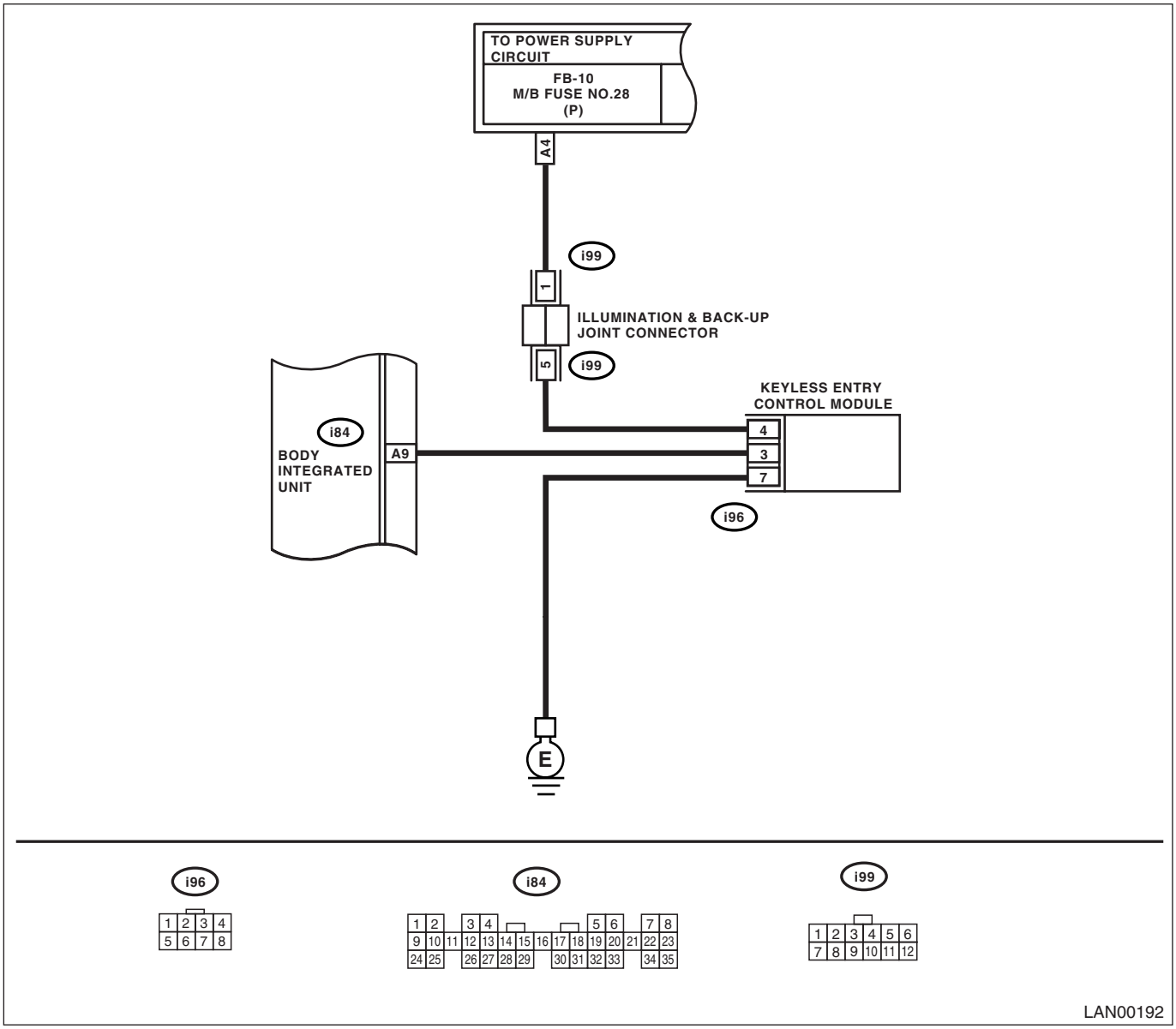
DTC DETECTING CONDITION:

Combination meter unit error, or harness between the main harness splice and combination meter unit is open or shorted, the connector is not connected properly and the terminal has poor caulking.

TROUBLE SYMPTOM:

Fail mode occurs because the data is not received from combination meter unit.

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK COMMUNICATION LINE.** 1) Warm up the engine. 2) Compare the data of body integrated unit and combination meter using Subaru Select Monitor. Check item: • Engine speed • Shift range	Is the data displayed same?	Go to step **2**.	Perform the self-diagnosis of combination meter. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>

	Step	Check	Yes	No
2	**CHECK HARNESS.** 1) Disconnect the body integrated unit and combination meter connector. 2) Measure the resistance between harness connectors. ***Connector & terminal*** ***(i10) No. 29 — (i84) No. 27:*** ***(i10) No. 30 — (i84) No. 26:***	Is the resistance less than 10 Ω?	Go to step **4**.	Go to step **3**.
3	**CHECK HARNESS.** 1) Disconnect the CAN joint connector (i128) with connector of unit disconnected. 2) Measure the resistance between harness connectors. ***Connector & terminal*** ***(i10) No. 29 — (i128) No. 1 to 6:*** ***(i10) No. 30 — (i128) No. 7 to 12:*** ***(i84) No. 27 — (i128) No. 1 to 6:*** ***(i84) No. 26 — (i128) No. 7 to 12:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the open circuit of harness.
4	**CHECK HARNESS.** Measure the resistance between harness connector (i128) and chassis ground. ***Connector & terminal*** ***(i128) No. 1 to 6 — Chassis ground:*** ***(i128) No. 7 to 12 — Chassis ground:***	Is the resistance less than 10 Ω?	Repair the short circuit of harness or replace harness.	Go to step **5**.
5	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Measure the voltage between harness connector (i77) and chassis ground. ***Connector & terminal*** ***(i128) No. 1 to 6 (+) — Chassis ground (–):*** ***(i128) No. 7 to 12 (+) — Chassis ground (–):***	Is the voltage more than 6 V?	Repair the short circuit of harness or replace harness.	Go to step **6**.
6	**CHECK COMBINATION METER.** Perform the self-diagnosis of combination meter. <Ref. to IDI-4, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>	Is the self-diagnosis OK?	Temporary poor contact occurs.	Check the connection of connector. Replace the combination meter. <Ref. to IDI-11, REMOVAL, Combination Meter.>

W: DTC B0500 KEYLESS UART COM. MALFUNCTION

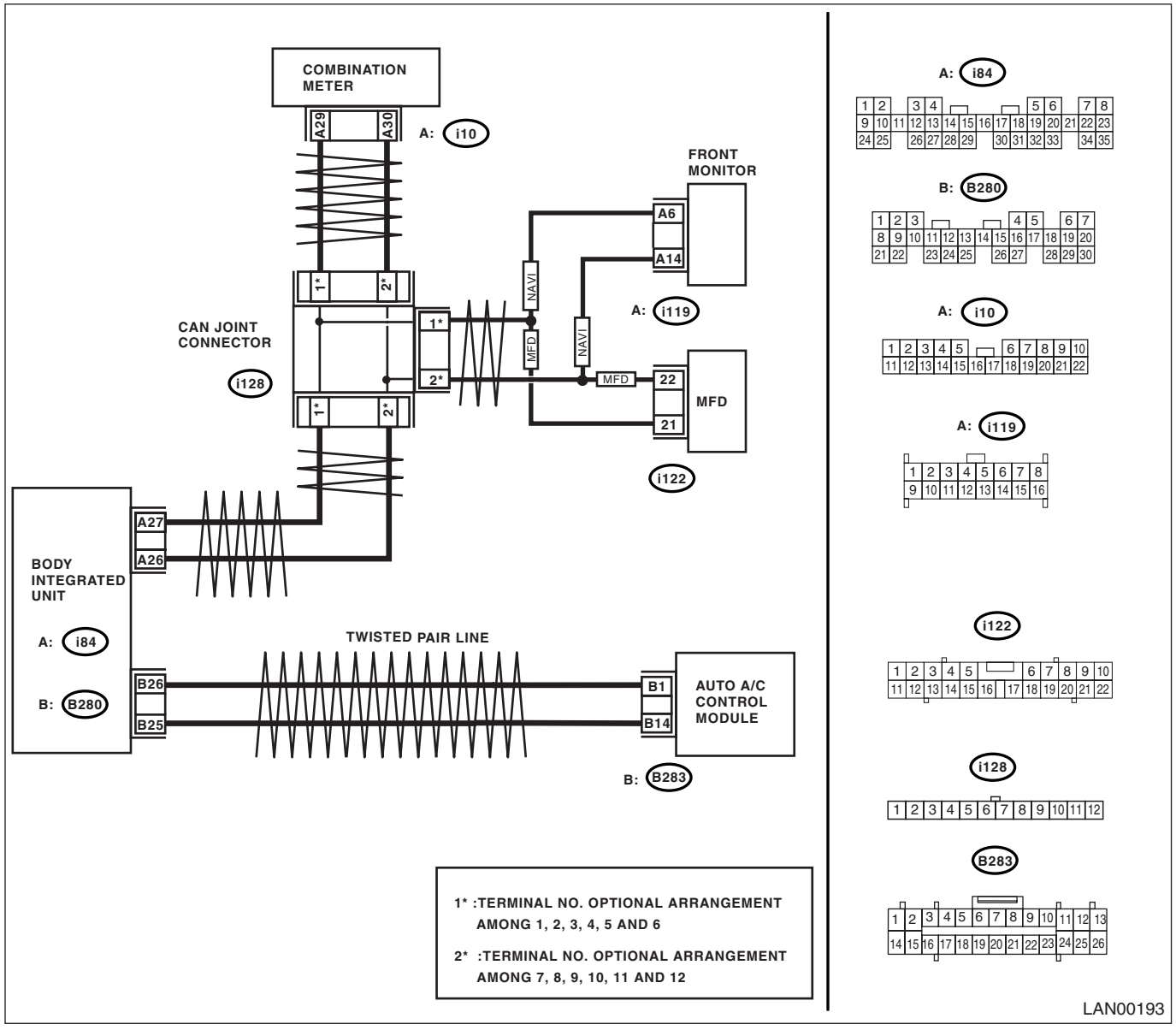
DTC DETECTING CONDITION:

UART between keyless control unit and body integrated unit is open or shorted, the connector is not connected properly, or the terminal has poor caulking.

TROUBLE SYMPTOM:

Door lock does not operate with keyless.

WIRING DIAGRAM:



Step		Check	Yes	No
1	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector (i84) and keyless entry control unit connector (i96). 2) Measure the resistance between harnesses. ***Connector & terminal (i84) No. 9 — (i96) No. 3:***	Is the resistance less than 10 Ω?	Go to step **2**.	Repair the open circuit of harness or replace harness.

	Step	Check	Yes	No
2	**CHECK HARNESS.** Measure the resistance between harness connector and chassis ground. ***Connector & terminal*** ***(i84) No. 9 — Chassis ground:***	Is the resistance less than 1M Ω?	Repair the short circuit of harness or replace harness.	Go to step **3**.
3	**CHECK HARNESS.** 1) Turn the ignition switch to ON. 2) Measure the voltage between harness connector and chassis ground. ***Connector & terminal*** ***(i84) No. 9 (+) — Chassis ground (–):***	Is the voltage more than 6 V?	Repair the short circuit of harness or replace harness.	Go to step **4**.
4	**OPERATION CHECK.** Check the door lock operation when the doors LOCK/UNLOCK using manual LOCK switch.	Does it operate on switch operation?	Go to step **5**.	Replace the body integrated unit. <Ref. to SL-52, REMOVAL, Body Integrated Unit.>
5	**OPERATION CHECK.** 1) Disconnect the key warning switch connector (B350). 2) Close all the doors, and then perform the LOCK/UNLOCK operation on keyless entry operation.	Does it operate?	Check key warning switch.	Replace the keyless entry control module. <Ref. to SL-50, REMOVAL, Keyless Entry Control Module.>