

11. Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: COMMUNICATION FOR INITIALIZING IMPOSSIBLE

NOTE:

- This is an inspection method for control modules using the Subaru Select Monitor communication line (K-line).
- For the control modules that read trouble code and current data using CAN communication circuit, perform diagnosis following DTCs for CAN communications.

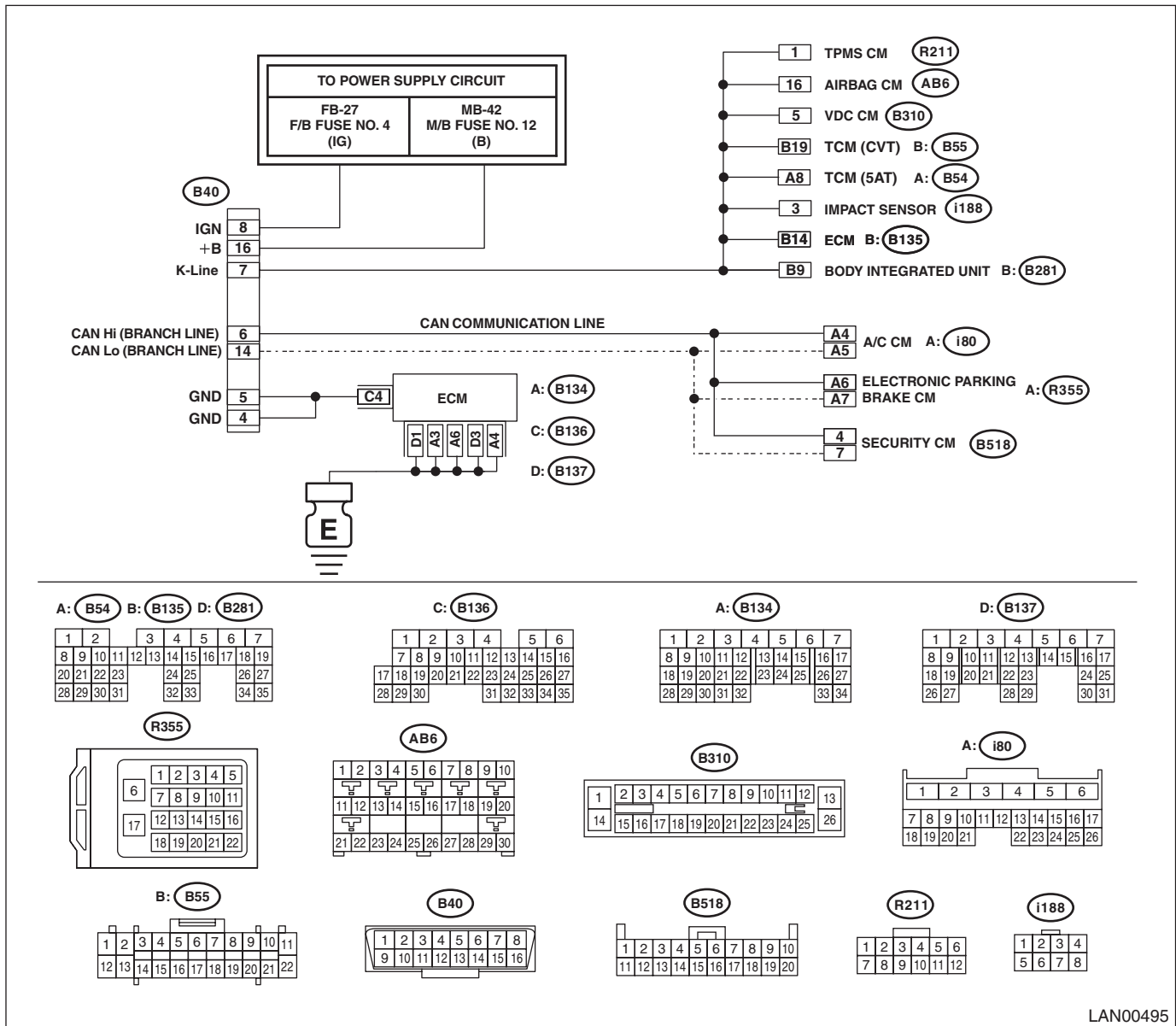
DIAGNOSIS:

Subaru Select Monitor communication line (K-line) is open or shorted.

TROUBLE SYMPTOM:

Not communicable with Subaru Select Monitor.

WIRING DIAGRAM:



LAN00495

Step	Check	Yes	No
1 CHECK COMBINATION METER. 1) Connect the Subaru Select Monitor. 2) Start the engine. 3) Check display of combination meter.	Does the warning lights illuminate or gauge have display error?	Go to step 2.	Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
2 CHECK SUBARU SELECT MONITOR. 1) Connect the Subaru Select Monitor to another vehicle. 2) Check communication condition between Subaru Select Monitor and vehicle.	Is communication performed normally?	Go to step 3.	Subaru Select Monitor unit or diagnosis cable is faulty.
3 CHECK CAN COMMUNICATION CIRCUIT. Check CAN communication circuit. (Refer to the inspection for CAN communication circuit.)	Is the CAN communication circuit normal?	Replace the modules that did not perform communication.	Repair the CAN communication circuit.
4 CHECK K-LINE. 1) Perform communication between Subaru Select Monitor and all modules. 2) Check continuity between the modules that did not communicate with Subaru Select Monitor. <i>Connector & terminal</i> (B40) No. 7 — (AB6) No. 16: (B40) No. 7 — (B310) No. 5: (B40) No. 7 — (B55) No. 19 (CVT): (B40) No. 7 — (B54) No. 8 (5AT): (B40) No. 7 — (B135) No. 14: (B40) No. 7 — (B281) No. 9: (B40) No. 7 — (R211) No. 1 (TPMS): (B40) No. 7 — (i188) No. 3 (OP):	Is there any continuity?	Go to step 5.	Repair or replace the open circuit portion.
5 CHECK K-LINE. Check continuity between K-line and chassis ground. <i>Connector & terminal</i> (B40) No. 7 — Chassis ground:	Is there any continuity?	Repair or replace the short circuit portion.	Go to step 6.
6 CHECK K-LINE. Check voltage between K-line and chassis ground. <i>Connector & terminal</i> (B40) No. 7 — Chassis ground:	Is the voltage 5 V or more with IG ON?	Repair or replace the short circuit portion.	Go to step 7.
7 CHECK GROUND CIRCUIT. Check continuity of ground circuit. <i>Connector & terminal</i> (B40) No. 4 — Chassis ground: (B40) No. 5 — Chassis ground:	Is there any continuity?	Go to step 9.	Go to step 8.
8 CHECK HARNESS. 1) Disconnect the connector from ECM. 2) Check continuity between data link connector and ECM. <i>Connector & terminal</i> (B40) No. 4 — (B137) No. 4: (B40) No. 5 — (B137) No. 4:	Is there any continuity?	Check ECM ground.	Repair or replace the open circuit portion.
9 CHECK POWER SUPPLY CIRCUIT. Check the power supply circuit for data link connector. <i>Connector & terminal</i> (B40) No. 8 (+) — Chassis ground (-): (B40) No. 16 (+) — Chassis ground (-):	Is the voltage 10 V or more?	The vehicle is normal.	Check the power supply circuits to the data link connector.

CAUTION:

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

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

B: DTC U1201 CAN-HS COUNTER ABNORMAL

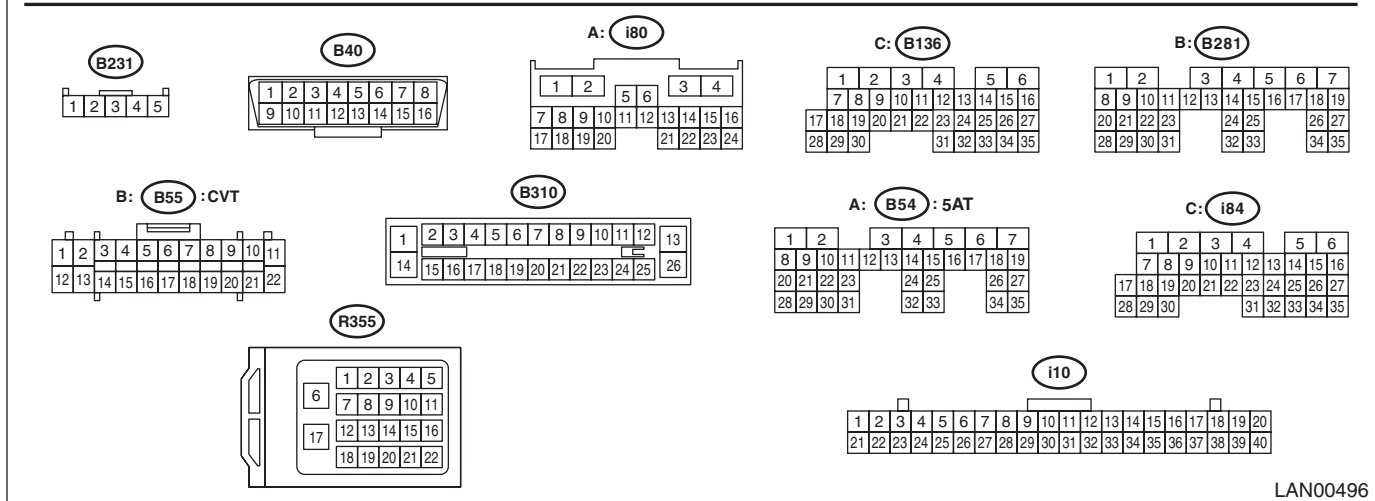
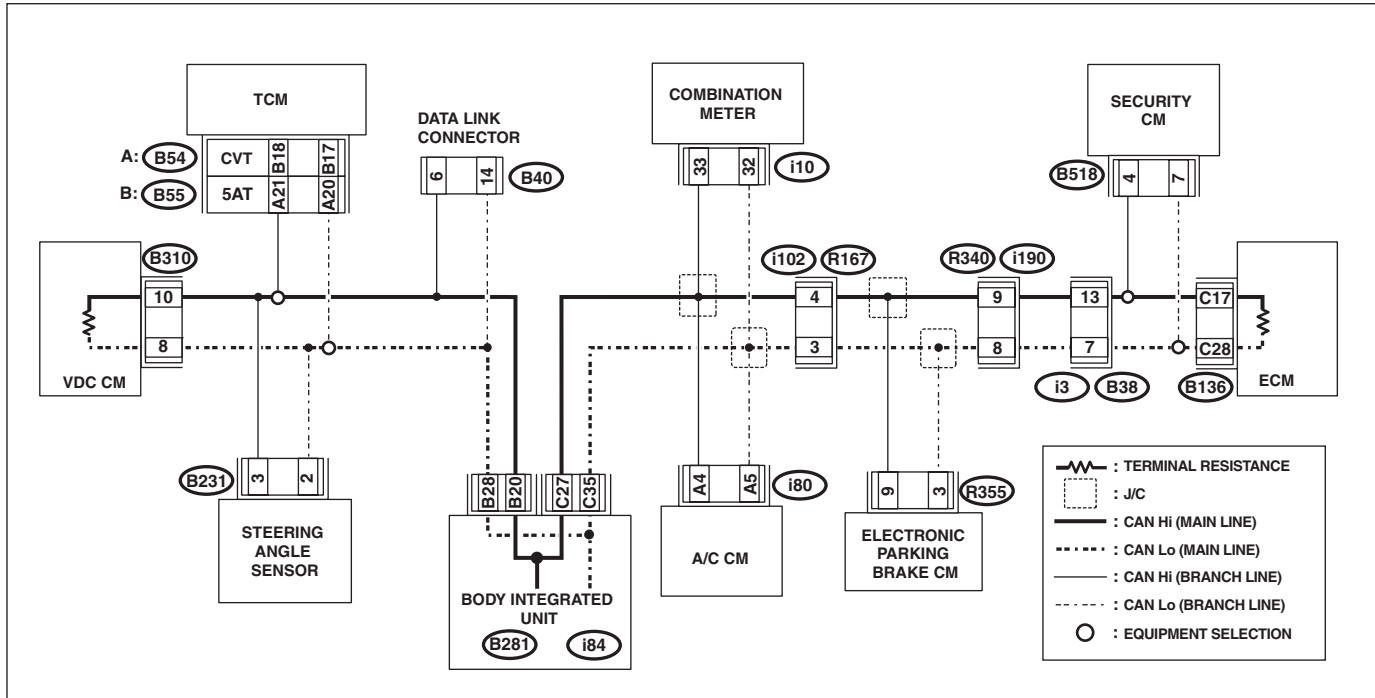
DTC DETECTING CONDITION:

Communication is unstable because of high speed CAN communication error.

TROUBLE SYMPTOM:

- Display of combination meter indicates faulty.
- Control faulty may occur due to CAN communication error.

WIRING DIAGRAM:



LAN00496

Step	Check	Yes	No	
1	CHECK CAN COMMUNICATION CIRCUIT. Check CAN communication circuit. <Ref. to LAN(diag)-12, PROCEDURE, CAN Communication Circuit Check.>	Is CAN communication circuit faulty?	Repair the faulty portion, following the diagnosis procedure.	Go to step 2.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
2 CHECK DTC. 1) Start the engine. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1202 a current malfunction?	Perform the diagnosis of U1202. <Ref. to LAN(diag)-49, DTC U1201 CANS COUNTER ABNORMAL, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>	Go to step 3.
3 CHECK DTC. Check the displayed DTC.	Is U1201 a current malfunction?	Go to step 4.	It may be a temporary communication malfunction. Perform the clear memory.
4 CHECK DTC. 1) Turn the ignition switch to ON. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1201 a current malfunction?	Go to step 5.	It may be a temporary communication malfunction. Perform the clear memory.
5 CHECK CONTROL MODULE. 1) Turn the ignition switch to OFF. 2) Disconnect the control modules other than body integrated unit in order. NOTE: When disconnecting ECM or VDC CM, connect resistance of 120 Ω between CAN Hi and CAN Lo as an alternative of end resistance. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is there any control module that U1201 is not detected as current malfunction?	Replace the control module.	Repeat 1) to 4) in step 5 until U1201 is not detected.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

C: DTC U1202 CAN-HS BUS OFF

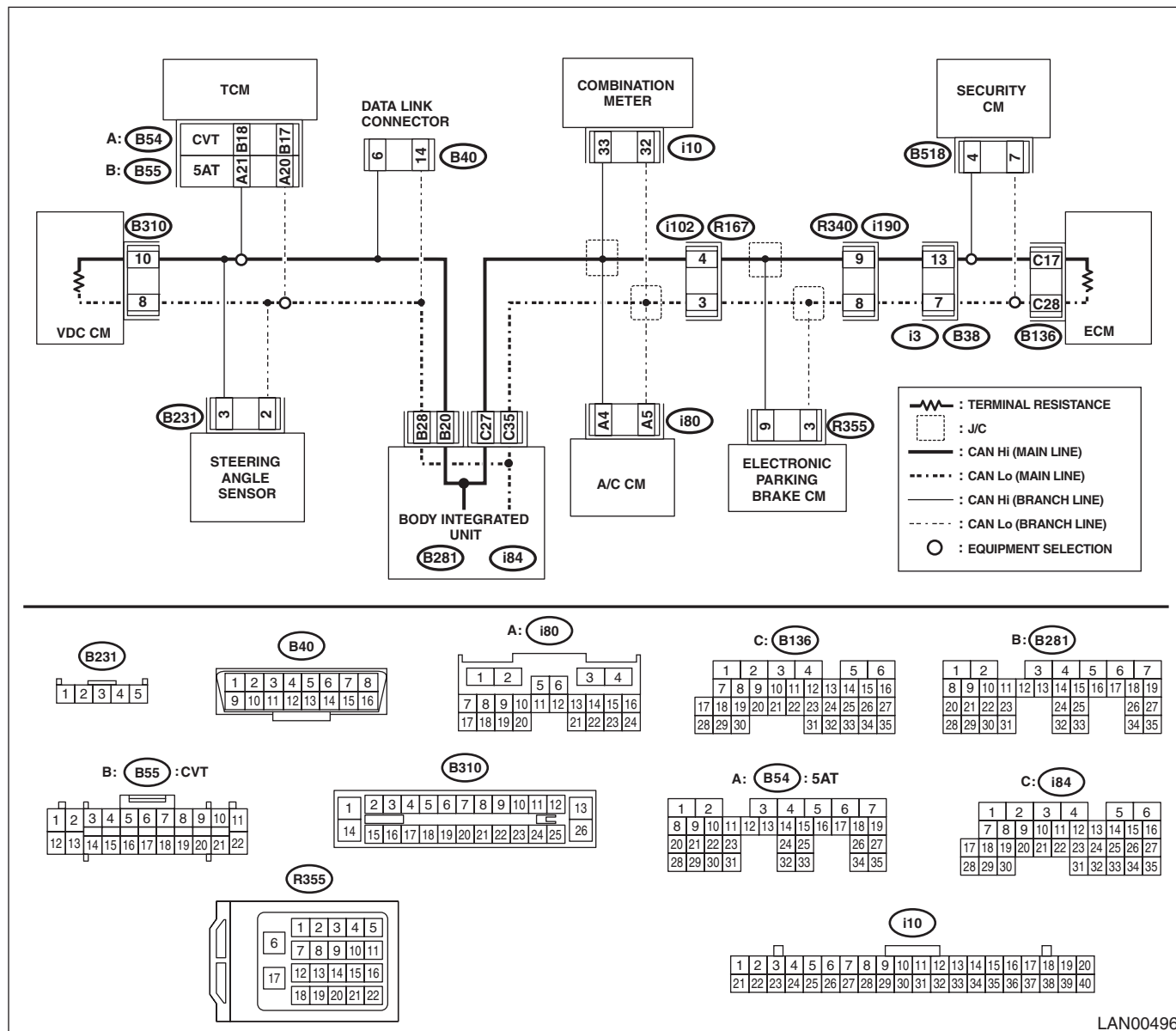
DTC DETECTING CONDITION:

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

TROUBLE SYMPTOM:

CAN communication is not normal.

WIRING DIAGRAM:



LAN00496

Step	Check	Yes	No
1	CHECK CAN COMMUNICATION CIRCUIT. Check CAN communication circuit. <Ref. to LAN(diag)-12, PROCEDURE, CAN Communication Circuit Check.>	Repair the faulty portion, following the diagnosis procedure.	Go to step 2.
2	CHECK DTC. 1) Start the engine. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Go to step 3.	It may be a temporary poor contact. Perform the clear memory.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK CONTROL MODULE. 1) Turn the ignition switch to OFF. 2) Disconnect the control modules other than body integrated unit in order. NOTE: When disconnecting ECM or VDC CM, connect resistance of 120 Ω between CAN Hi and CAN Lo as an alternative of end resistance. 3) Turn the ignition switch to ON. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is there any control module that U1201 is not detected as current malfunction?	Replace the control module.	Repeat 1) to 4) in step 5 until U1202 is not detected.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

D: DTC U1211 CAN-HS ECM DATA ABNORMAL

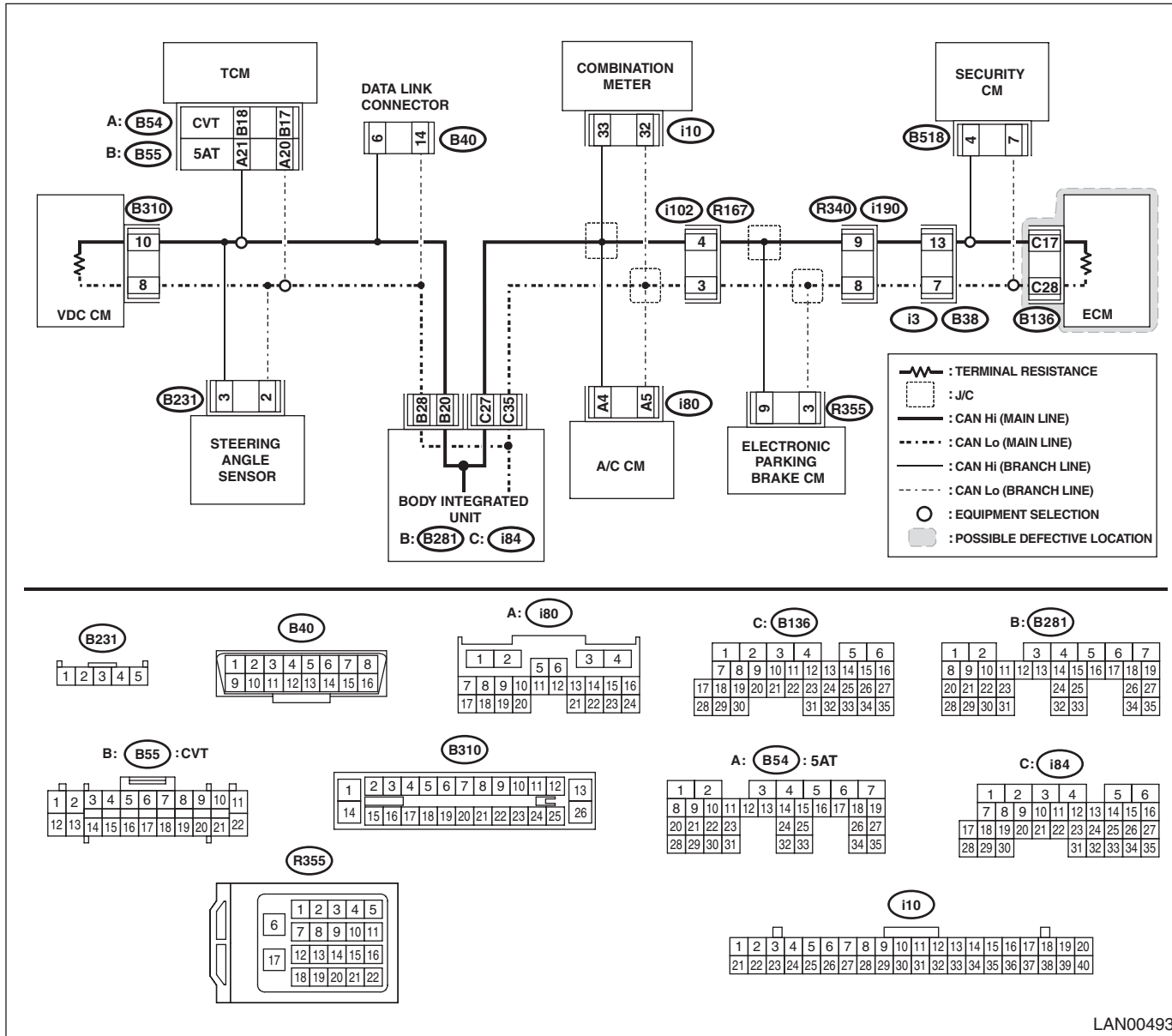
DTC DETECTING CONDITION:

Defective data from ECM.

TROUBLE SYMPTOM:

Defective data on CAN communication occurs.

WIRING DIAGRAM:



LAN00493

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1211 a current malfunction?	Go to step 3. Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from ECM. 3) Connect the disconnected connectors. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1211 a current malfunction?	Replace the ECM. <Ref. to FU(H6DO)-50, Engine Control Module (ECM).>	Go to step 4.
4 CHECK HARNESS. 1) Shake the harness, and check for poor contact. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1202 a current malfunction?	Repair the poor contact of harness, or replace the harness.	Go to step 5.
5 CHECK CONNECTOR. Check the connector used for high speed CAN for poor contact.	Is there poor contact of connector?	Repair the connector that has poor contact, or replace harness.	It may be a temporary communication malfunction. Delete the DTC.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

E: DTC U1212 CAN-HS TCM DATA ABNORMAL

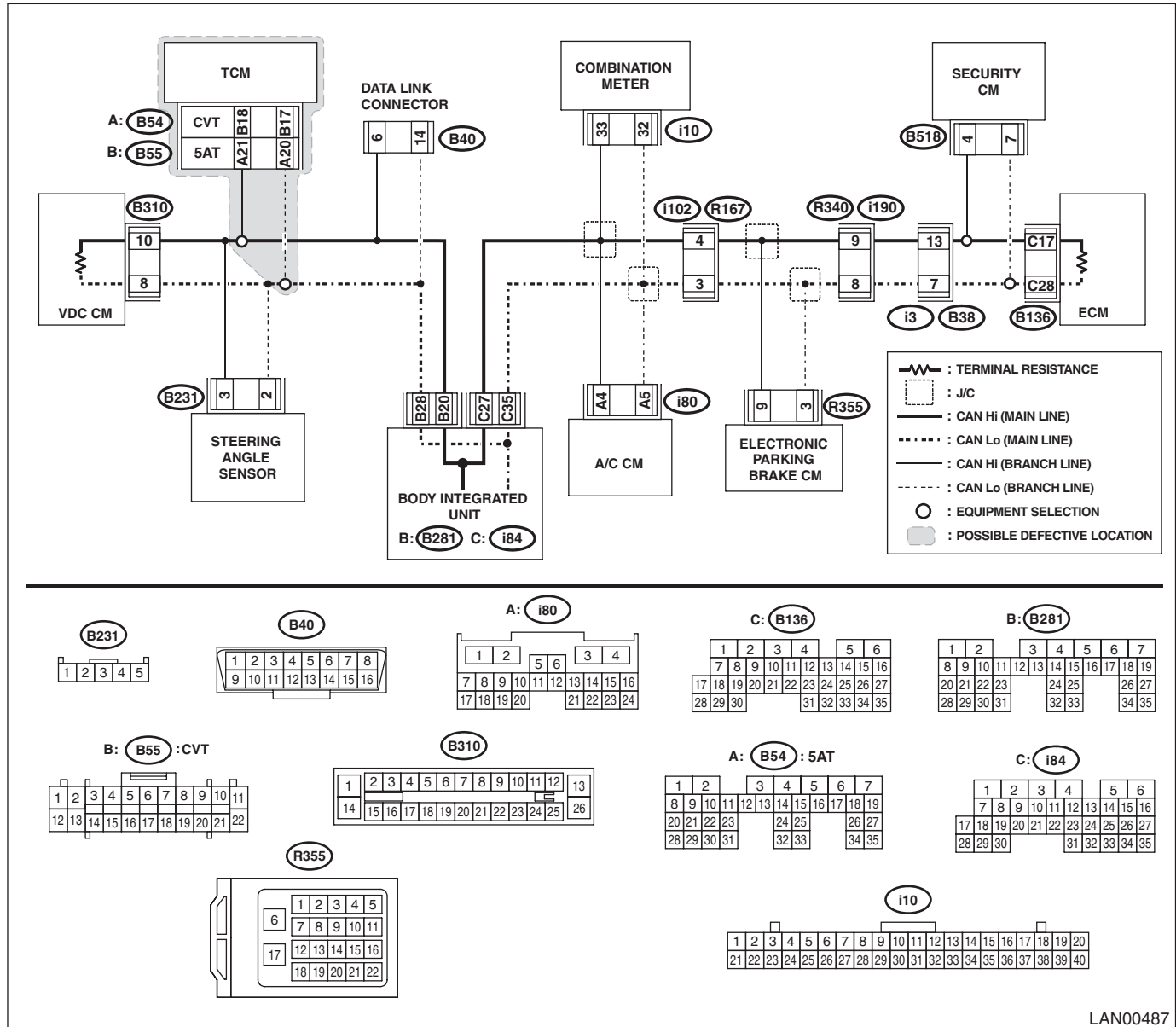
DTC DETECTING CONDITION:

Received error data from TCM.

TROUBLE SYMPTOM:

SPORT indicator light blinks.

WIRING DIAGRAM:



LAN00487

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1212 a current malfunction?	Go to step 3. Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the TCM connector. 3) Connect the disconnected connectors. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1212 a current malfunction?	Replace the TCM. <Ref. to 5AT-58, Transmission Control Module (TCM).>	Go to step 4.
4 CHECK HARNESS. 1) Shake the harness, and check for poor contact. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1212 a current malfunction?	Repair the poor contact of harness, or replace the harness.	Go to step 5.
5 CHECK CONNECTOR. Check the connector used for high speed CAN for poor contact.	Is there poor contact of connector?	Repair the connector that has poor contact, or replace harness.	A temporary communication failure may be a possible cause. Clear the DTC memory.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

F: DTC U1213 CAN-HS VDC DATA ABNORMAL

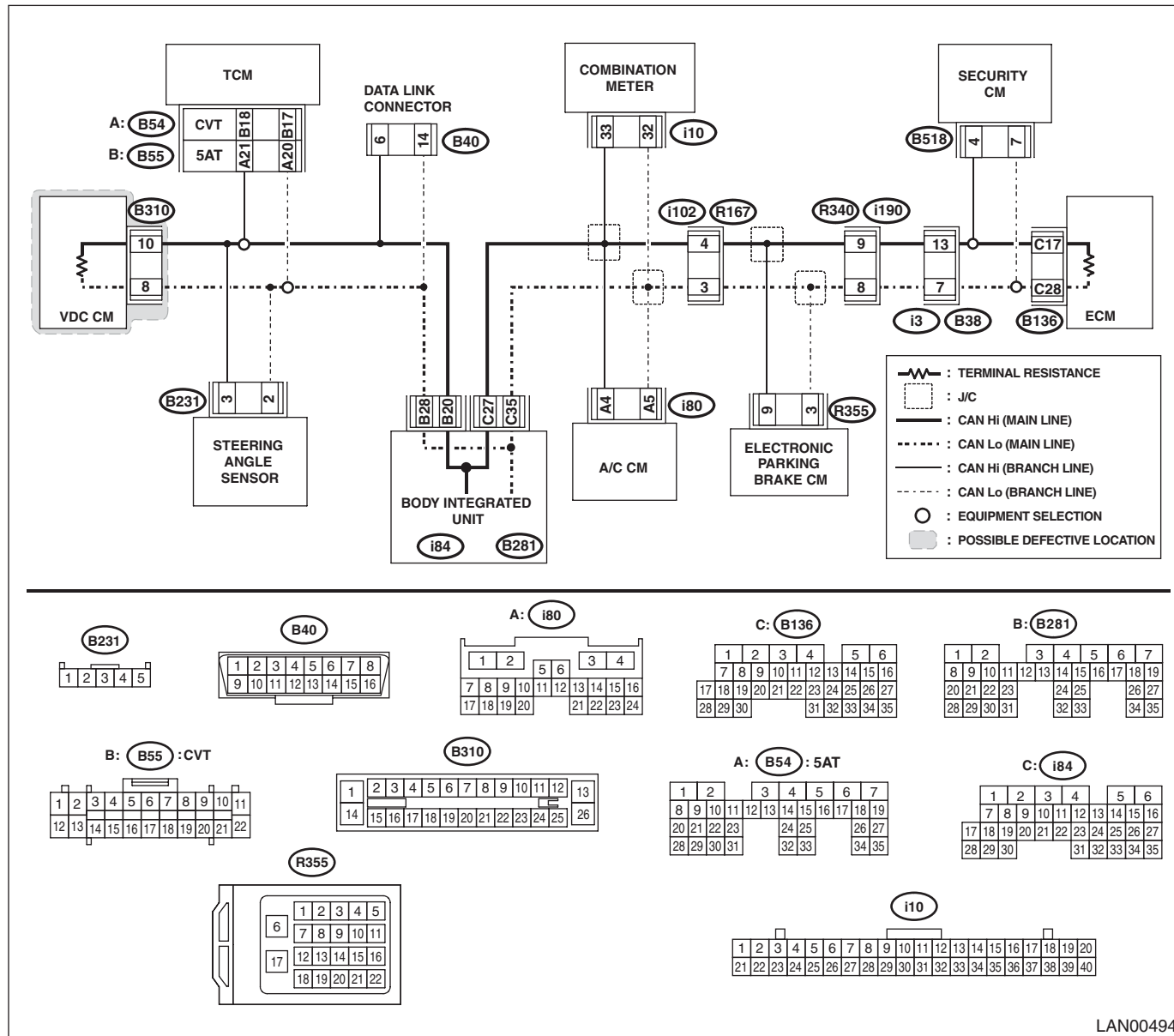
DTC DETECTING CONDITION:

Data from VDCCM is faulty.

TROUBLE SYMPTOM:

ABS warning light and VDC warning light illuminate.

WIRING DIAGRAM:



LAN00494

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1213 a current malfunction?	Go to step 3. Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the VDC CM connector. 3) Connect the disconnected connectors. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1213 a current malfunction?	Replace the VDC CM. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 4.
4 CHECK HARNESS. 1) Shake the harness, and check for poor contact. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1213 a current malfunction?	Repair the poor contact of harness, or replace the harness.	Go to step 5.
5 CHECK CONNECTOR. Check the connector used for high speed CAN for poor contact.	Is there poor contact of connector?	Repair the connector that has poor contact, or replace harness.	A temporary communication failure may be a possible cause. Clear the DTC memory.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

G: DTC U1219 CAN-HS EPB DATA ABNORMAL

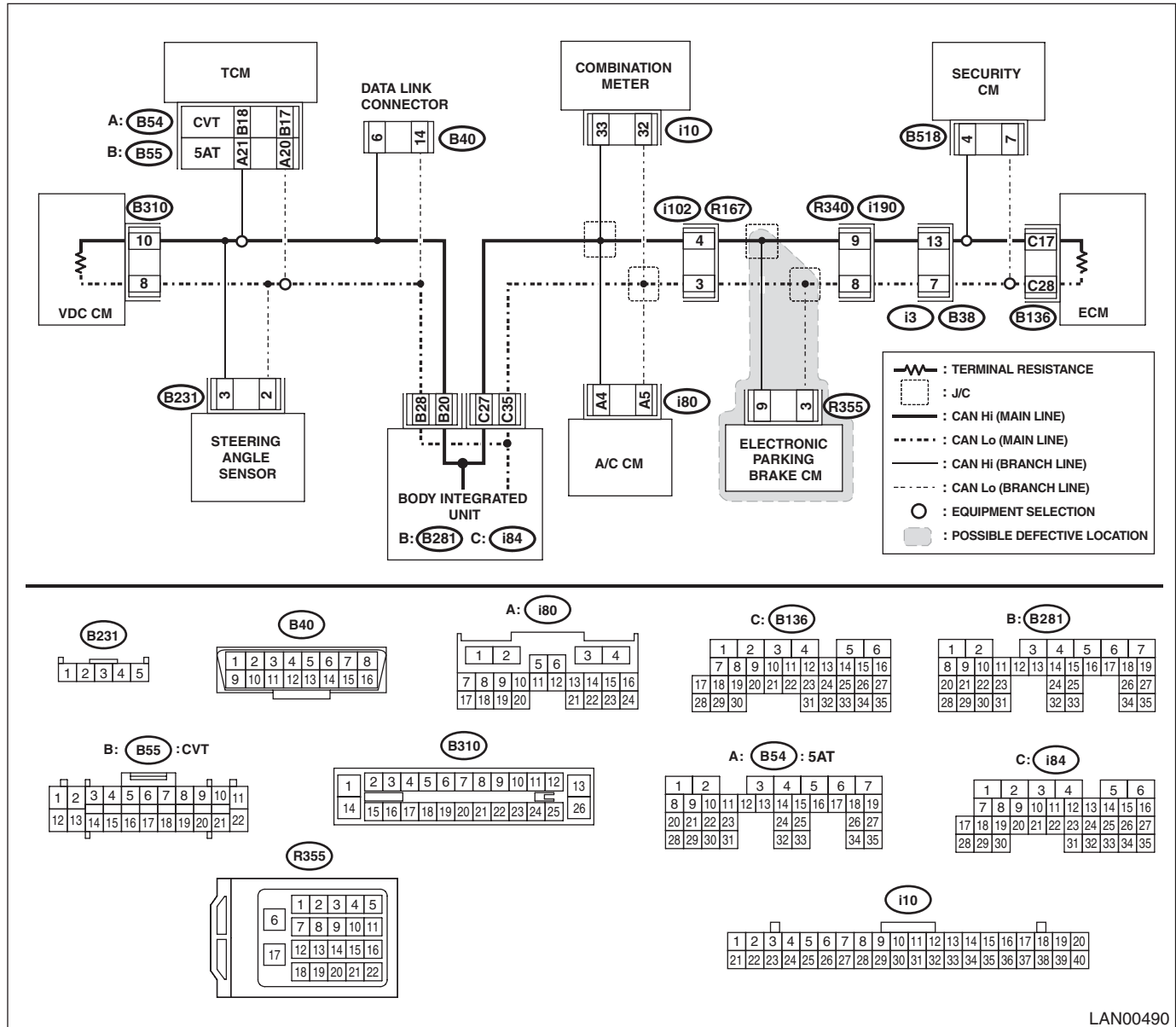
DTC DETECTING CONDITION:

Defective data was transmitted from electronic parking brake control module.

TROUBLE SYMPTOM:

Electronic parking brake cooperation control does not operate.

WIRING DIAGRAM:



LAN00490

Step	Check	Yes	No	
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules.	Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1219 a current malfunction?	Go to step 3.	Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U1219 a current malfunction?	Replace the electronic parking CM. <Ref. to PB-5, REMOVAL, Parking Brake Actuator.>	Go to step 4.
4 CHECK ELECTRONIC PARKING CM. 1) Disconnect the electronic parking CM connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U1219?	Go to step 5.	Replace the electronic parking CM. <Ref. to PB-5, REMOVAL, Parking Brake Actuator.>
5 CHECK ELECTRONIC PARKING CM. 1) Connect the electronic parking CM connector. 2) Using the Subaru Select Monitor, read DTC of electronic parking CM. <Ref. to PB(diag)-14, OPERATION, Subaru Select Monitor.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

H: DTC U121A CAN-HS METER UNIT DATA ABNORMAL

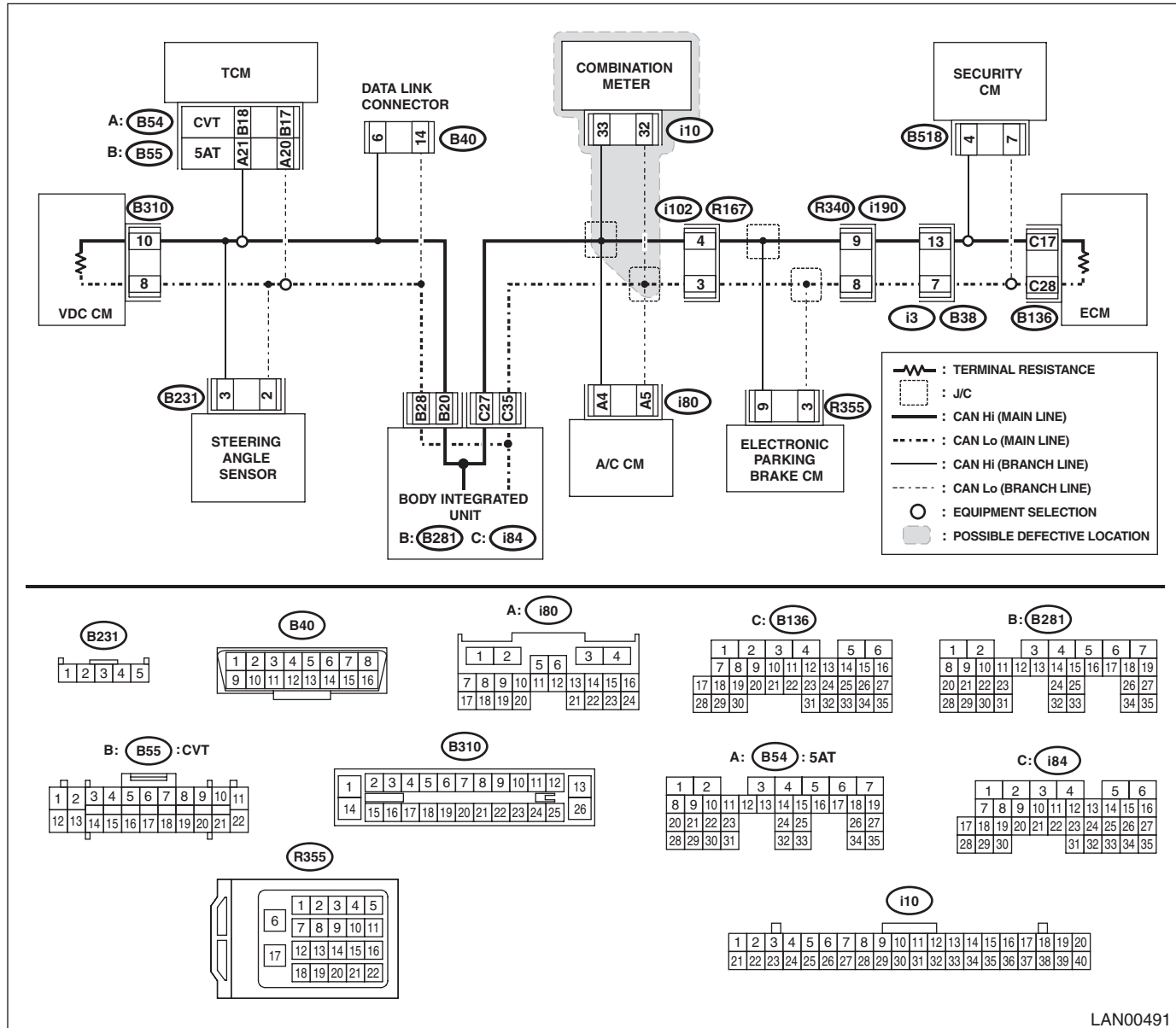
DTC DETECTING CONDITION:

Defective data was transmitted from combination meter.

TROUBLE SYMPTOM:

Display of combination meter does not operate properly.

WIRING DIAGRAM:



LAN00491

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U121A a current malfunction?	Go to step 3. Go to step 4.
3	CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U121A a current malfunction?	Replace the combination meter. <Ref. to IDI-20, REMOVAL, Combination Meter.> Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
4 CHECK COMBINATION METER. 1) Disconnect the combination meter connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U121A?	Go to step 5.	Replace the combination meter. <Ref. to IDI-20, REMOVAL, Combination Meter.>
5 CHECK COMBINATION METER. 1) Connect the combination meter connector. 2) Using the Subaru Select Monitor, read DTC of combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

I: DTC U121B CAN-HS A/C DATA ABNORMAL

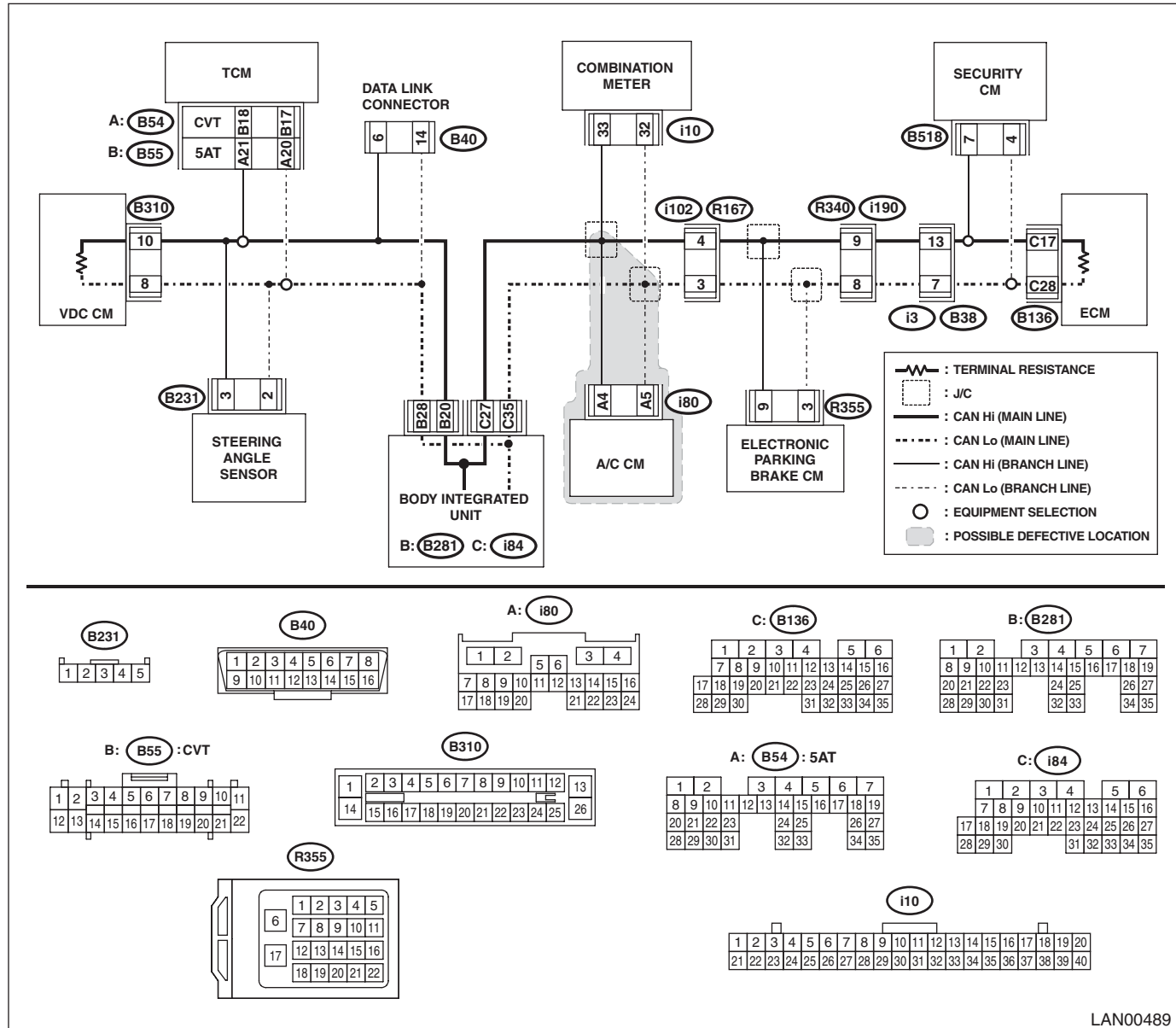
DTC DETECTING CONDITION:

Defective data was transmitted from A/C CM.

TROUBLE SYMPTOM:

Cooperation control of air conditioner does not operate properly.

WIRING DIAGRAM:



LAN00489

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U121B a current malfunction?	Go to step 3. Go to step 4.
3	CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U121B a current malfunction?	Replace the A/C CM. <Ref. to AC-46, REMOVAL, Control Unit.> Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
4 CHECK A/C CM. 1) Disconnect the A/C CM connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U121B?	Go to step 5.	Replace the A/C CM. <Ref. to AC-46, REMOVAL, Control Unit.>
5 CHECK A/C CM. 1) Connect the A/C CM connector. 2) Using the Subaru Select Monitor, read DTC of A/C CM. <Ref. to AC(diag)-25, OPERATION, Subaru Select Monitor.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

J: DTC U121C CAN-HS SCU DATA ABNORMAL

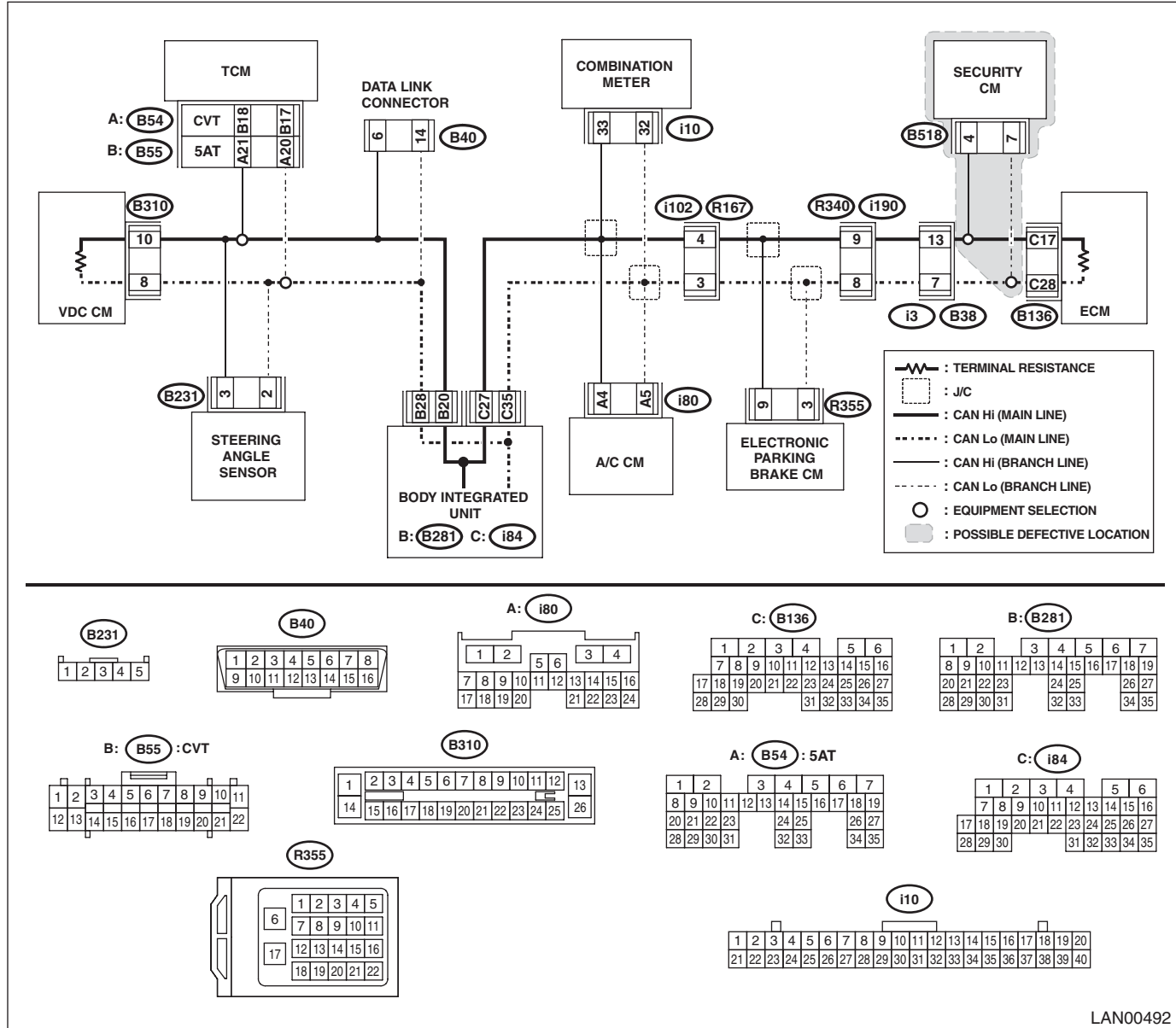
DTC DETECTING CONDITION:

Defective data was transmitted from SCM.

TROUBLE SYMPTOM:

Immobilizer does not operate normally.

WIRING DIAGRAM:



LAN00492

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U121C a current malfunction?	Go to step 3. Go to step 4.
3	CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U121C a current malfunction?	Replace SCM. <Ref. to SL-66, REMOVAL, Security Control Module.> Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
4 CHECK SCM. 1) Disconnect the connector from SCM. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U121C?	Go to step 5.	Replace SCM. <Ref. to SL-66, REMOVAL, Security Control Module.>
5 CHECK SCM. 1) Connect the SCM connector. 2) Using the Subaru Select Monitor, read DTC of immobilizer. <Ref. to IM(diag)-9, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

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

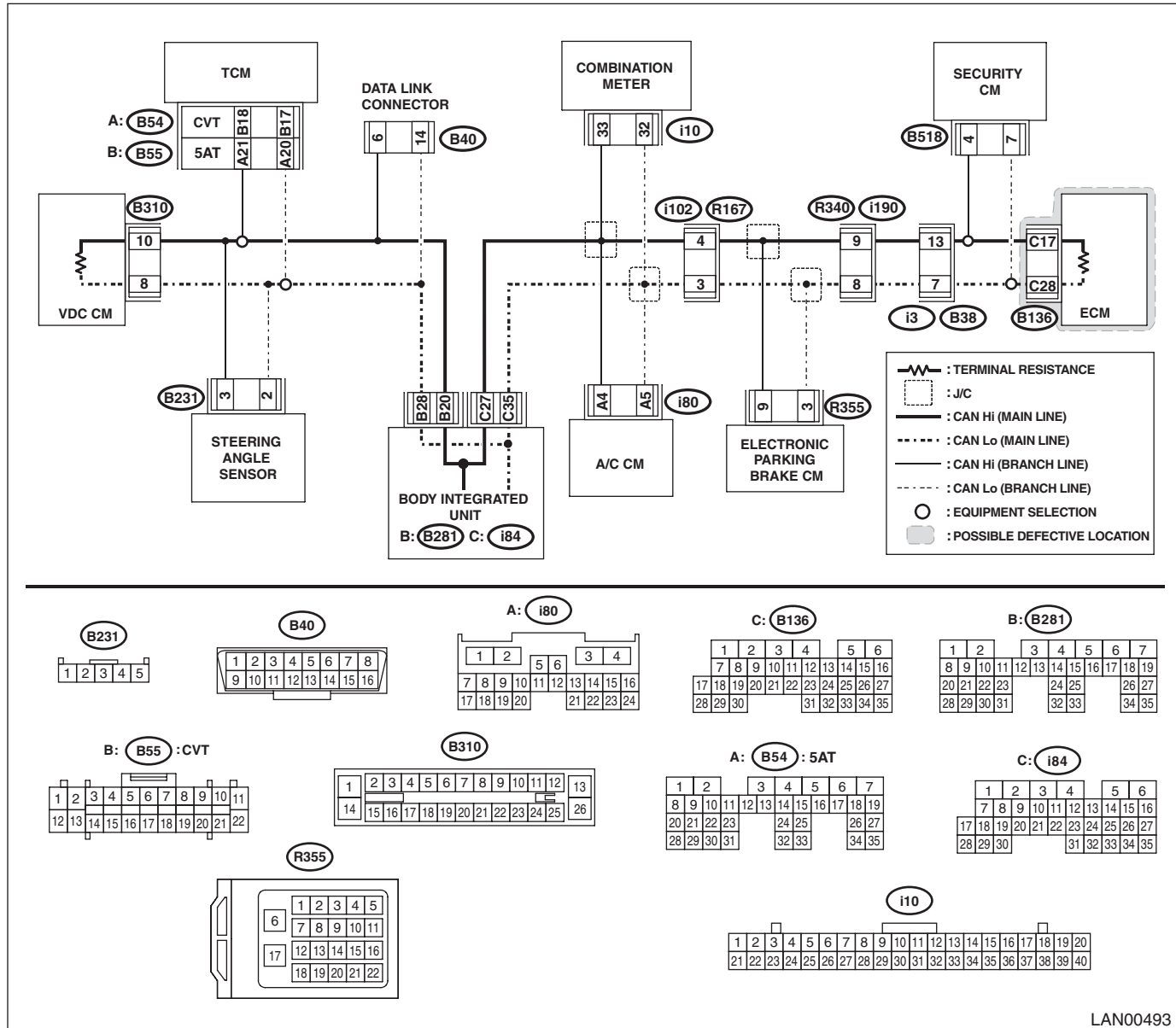
DTC DETECTING CONDITION:

Not received data from ECM.

TROUBLE SYMPTOM:

Cooperation control of transmission may not operate properly.

WIRING DIAGRAM:



LAN00493

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1221 a current malfunction?	Go to step 3. Go to step 7.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the control module connector that is connected to high speed CAN. 3) Connect the disconnected connectors. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1221 a current malfunction?	Go to step 4.	Go to step 7.
4 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the control module connector that is connected to high speed CAN. 3) Using the tester, measure the resistance between terminals. Connector & terminal (B40) No. 6 — (B136) No. 17: (B40) No. 14 — (B136) No. 28:	Is the resistance 10 Ω or less?	Go to step 5.	Repair the open circuit of harness or replace harness.
5 CHECK DTC. 1) Connect the disconnected connectors. 2) Start the engine. 3) Turn the ignition switch to OFF. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1221 a current malfunction?	Go to step 6.	Go to step 7.
6 CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is P1718, C0044, C0045 detected?	Replace the ECM. <Ref. to FU(H4DOTC)-57, REMOVAL, Engine Control Module (ECM).>	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>
7 CHECK HARNESS. 1) Shake the harness, and check for poor contact. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1221 a current malfunction?	Repair the poor contact of harness, or replace the harness.	Go to step 8.
8 CHECK CONNECTOR. Check the connector used for high speed CAN for poor contact.	Is there poor contact of connector?	Repair the connector, or replace harness.	It may be a temporary communication malfunction. Delete the DTC.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

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

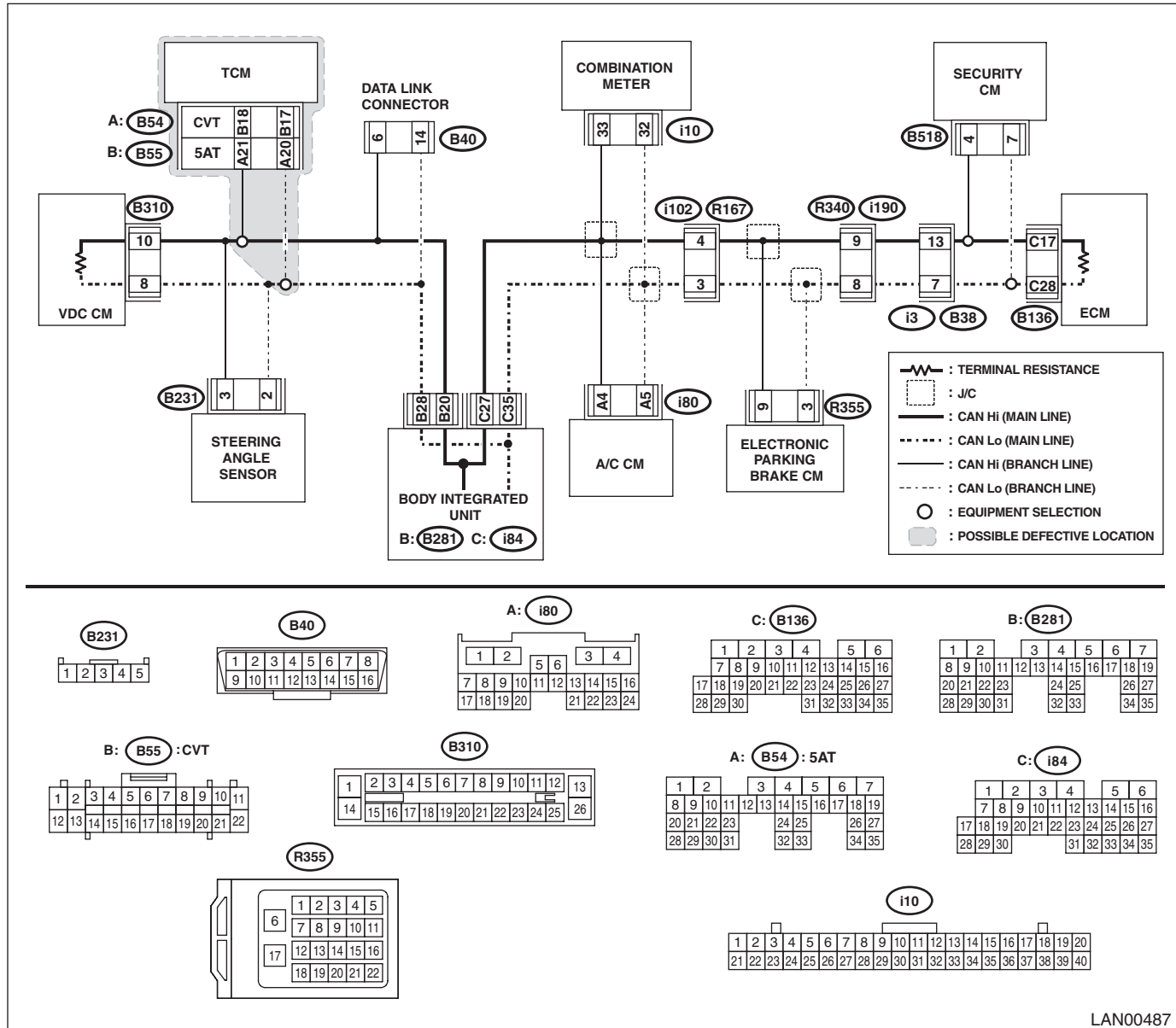
DTC DETECTING CONDITION:

Not received data from TCM.

TROUBLE SYMPTOM:

Cooperation control with transmission is not performed.

WIRING DIAGRAM:



LAN00487

Step	Check	Yes	No	
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules.	Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1222 a current malfunction?	Go to step 3.	Go to step 7.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the control module connector that is connected to high speed CAN. 3) Connect the disconnected connectors. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1222 a current malfunction?	Go to step 4.	Go to step 7.
4 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the control module connector that is connected to high speed CAN. 3) Using the tester, measure the resistance between terminals. Connector & terminal (B40) No. 6 — (B55) No. 18 (CVT): (B40) No. 14 — (B55) No. 17 (CVT): (B40) No. 6 — (B54) No. 21 (5AT): (B40) No. 14 — (B54) No. 20 (5AT):	Is the resistance 10 Ω or less?	Go to step 5.	Repair the open circuit of harness or replace harness.
5 CHECK DTC. 1) Connect the disconnected connectors. 2) Start the engine. 3) Turn the ignition switch to OFF (stop the engine). 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1222 a current malfunction?	Go to step 6.	Go to step 7.
6 CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is P1718, C0044, C0045 detected?	Replace the TCM. <Ref. to 5AT-58, REMOVAL, Transmission Control Module (TCM).>	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>
7 CHECK HARNESS. 1) Shake the harness, and check for poor contact. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1222 a current malfunction?	Repair the open circuit of harness or replace harness.	Go to step 8.
8 CHECK CONNECTOR. Check the connector used for high speed CAN for poor contact.	Is there poor contact of connector?	Repair the connector, or replace harness.	It may be a temporary communication malfunction. Delete the DTC.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

M: DTC U1223 CAN-HS VDC NO-RECEIVE DATA

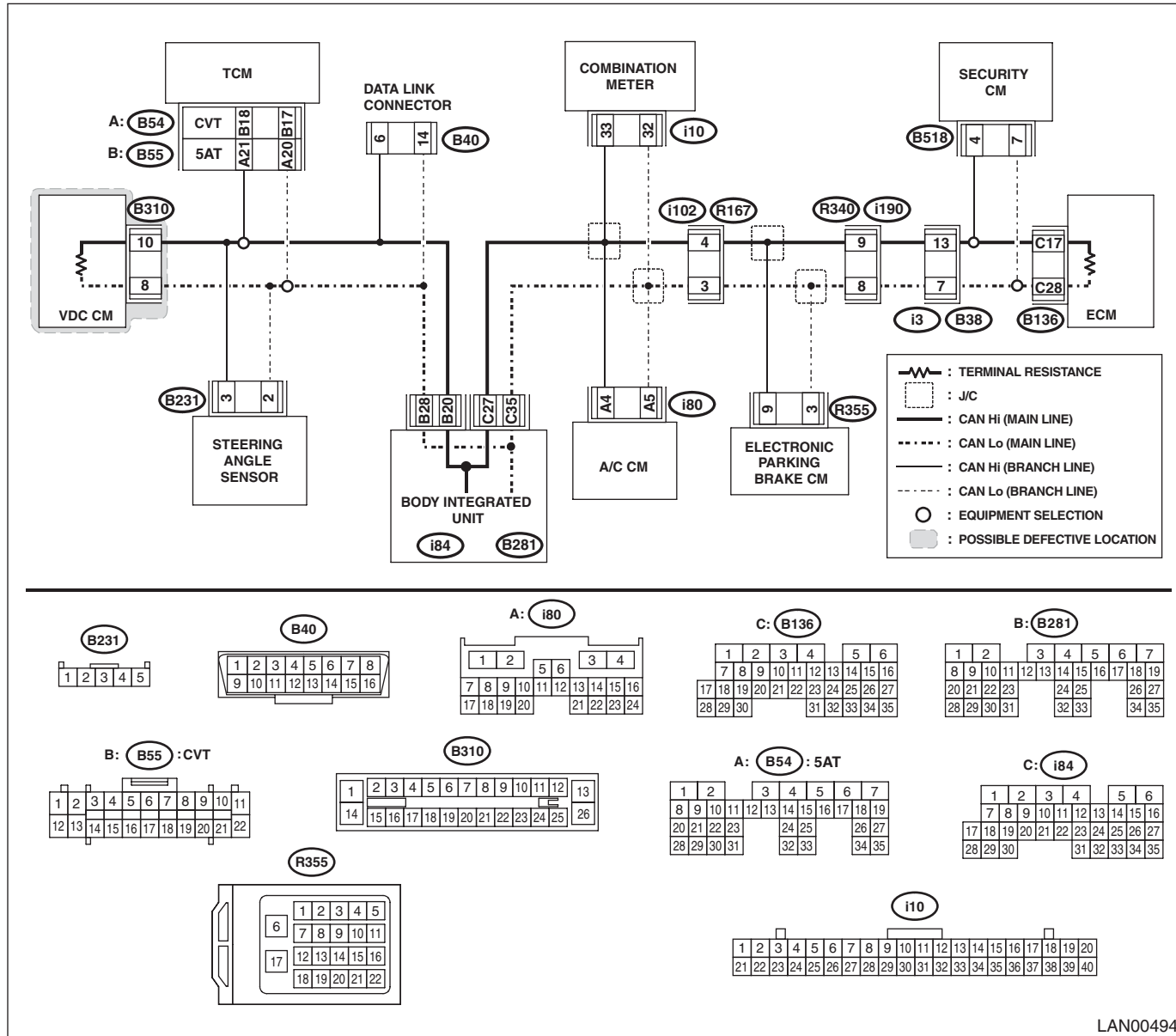
DTC DETECTING CONDITION:

No data from VDCCM is received.

TROUBLE SYMPTOM:

ABS warning light and VDC warning light illuminate.

WIRING DIAGRAM:



LAN00494

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1223 a current malfunction?	Go to step 3. Go to step 7.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the control module connector that is connected to high speed CAN. 3) Connect the disconnected connectors. 4) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1223 a current malfunction?	Go to step 4.	Go to step 7.
4 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the control module connector that is connected to high speed CAN. 3) Using the tester, measure the resistance between terminals. Connector & terminal <i>(B40) No. 6 — (B310) No. 10:</i> <i>(B40) No. 6 — (B231) No. 3:</i> <i>(B40) No. 14 — (B310) No. 8:</i> <i>(B40) No. 14 — (B231) No. 2:</i>	Is the resistance 10 Ω or less?	Go to step 5.	Repair the open circuit of harness or replace harness.
5 CHECK DTC. 1) Connect the disconnected connectors. 2) Start the engine. 3) Turn the ignition switch to OFF. 4) Using the Subaru Select Monitor, read DTC of CAN system.	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 detected?	Replace the VDC CM. <Ref. to VDC-7, REMOVAL, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>
7 CHECK HARNESS. 1) Shake the harness, and check for poor contact. 2) Using the Subaru Select Monitor, read DTC of CAN system.	Is U1223 a current malfunction?	Repair the poor contact of harness, or replace the harness.	Go to step 8.
8 CHECK CONNECTOR. Check the connector used for high speed CAN for poor contact.	Is there poor contact of connector?	Repair the connector, or replace harness.	It may be a temporary communication malfunction. Delete the DTC.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

N: DTC U1229 CAN-HS EPB NO-RECEIVE DATA

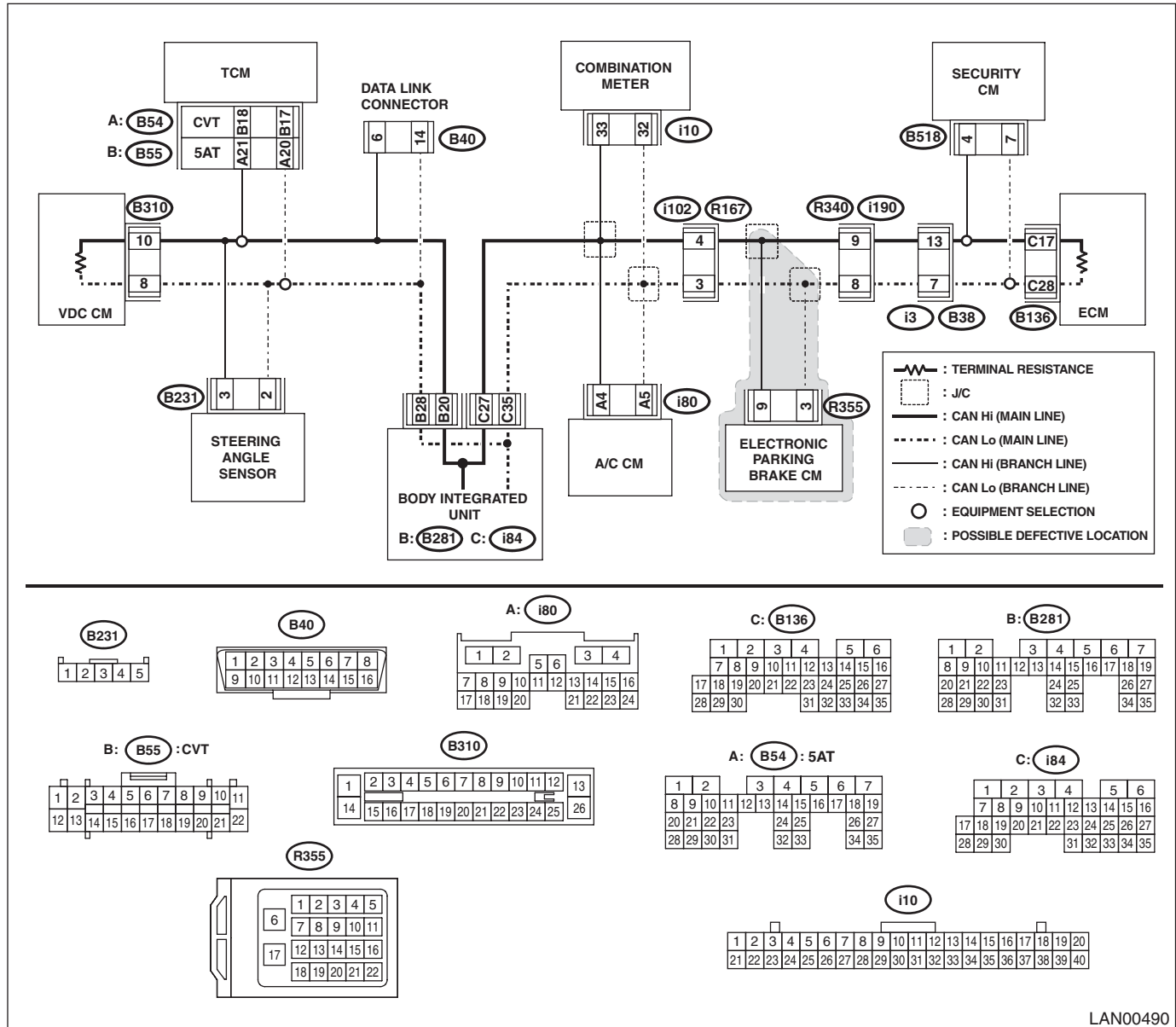
DTC DETECTING CONDITION:

No data from electronic parking brake control module is received.

TROUBLE SYMPTOM:

Electronic parking brake cooperation control does not operate.

WIRING DIAGRAM:



LAN00490

Step	Check	Yes	No	
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules.	Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U1229 a current malfunction?	Go to step 3.	Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U1229 a current malfunction?	Replace the electronic parking CM. <Ref. to PB-5, REMOVAL, Parking Brake Actuator.>	Go to step 4.
4 CHECK ELECTRONIC PARKING CM. 1) Disconnect the electronic parking CM connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U1229?	Go to step 5.	Replace the electronic parking CM. <Ref. to PB-5, REMOVAL, Parking Brake Actuator.>
5 CHECK ELECTRONIC PARKING CM. 1) Connect the electronic parking CM connector. 2) Using the Subaru Select Monitor, read DTC of electronic parking CM. <Ref. to PB(diag)-14, OPERATION, Subaru Select Monitor.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

O: DTC U122A CAN-HS METER NO-RECEIVE DATA

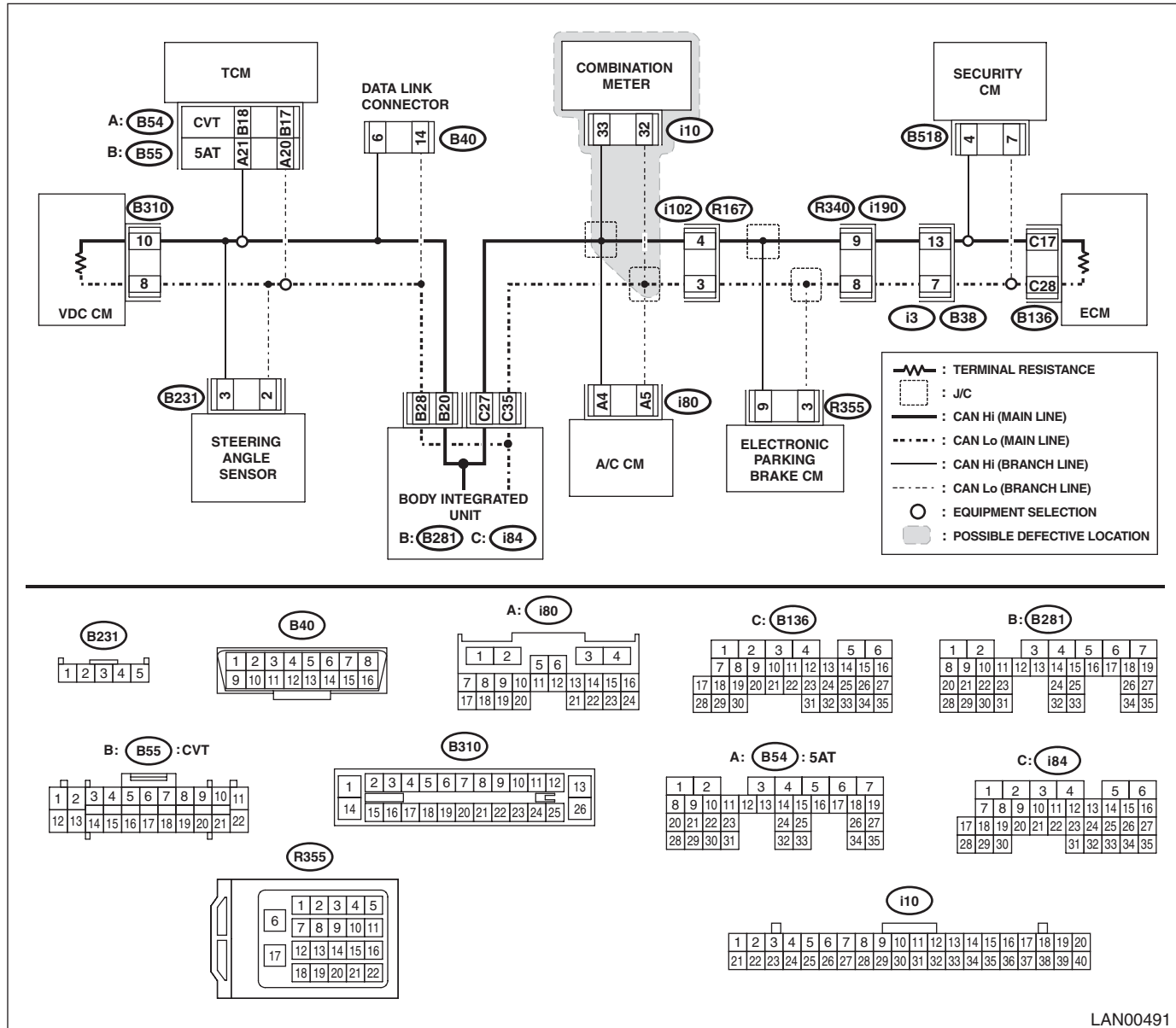
DTC DETECTING CONDITION:

No data received from combination meter.

TROUBLE SYMPTOM:

Display of combination meter does not operate properly.

WIRING DIAGRAM:



LAN00491

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U122A a current malfunction?	Go to step 3. Go to step 4.
3	CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U122A a current malfunction?	Replace the combination meter. <Ref. to IDI-20, REMOVAL, Combination Meter.> Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
4 CHECK COMBINATION METER. 1) Disconnect the combination meter connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U122A?	Go to step 5.	Replace the combination meter. <Ref. to IDI-20, REMOVAL, Combination Meter.>
5 CHECK COMBINATION METER. 1) Connect the combination meter connector. 2) Using the Subaru Select Monitor, read DTC of combination meter. <Ref. to IDI-6, SELF-DIAGNOSIS DISPLAY MODE, OPERATION, Combination Meter System.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

P: DTC U122B CAN-HS A/C NO-RECEIVE DATA

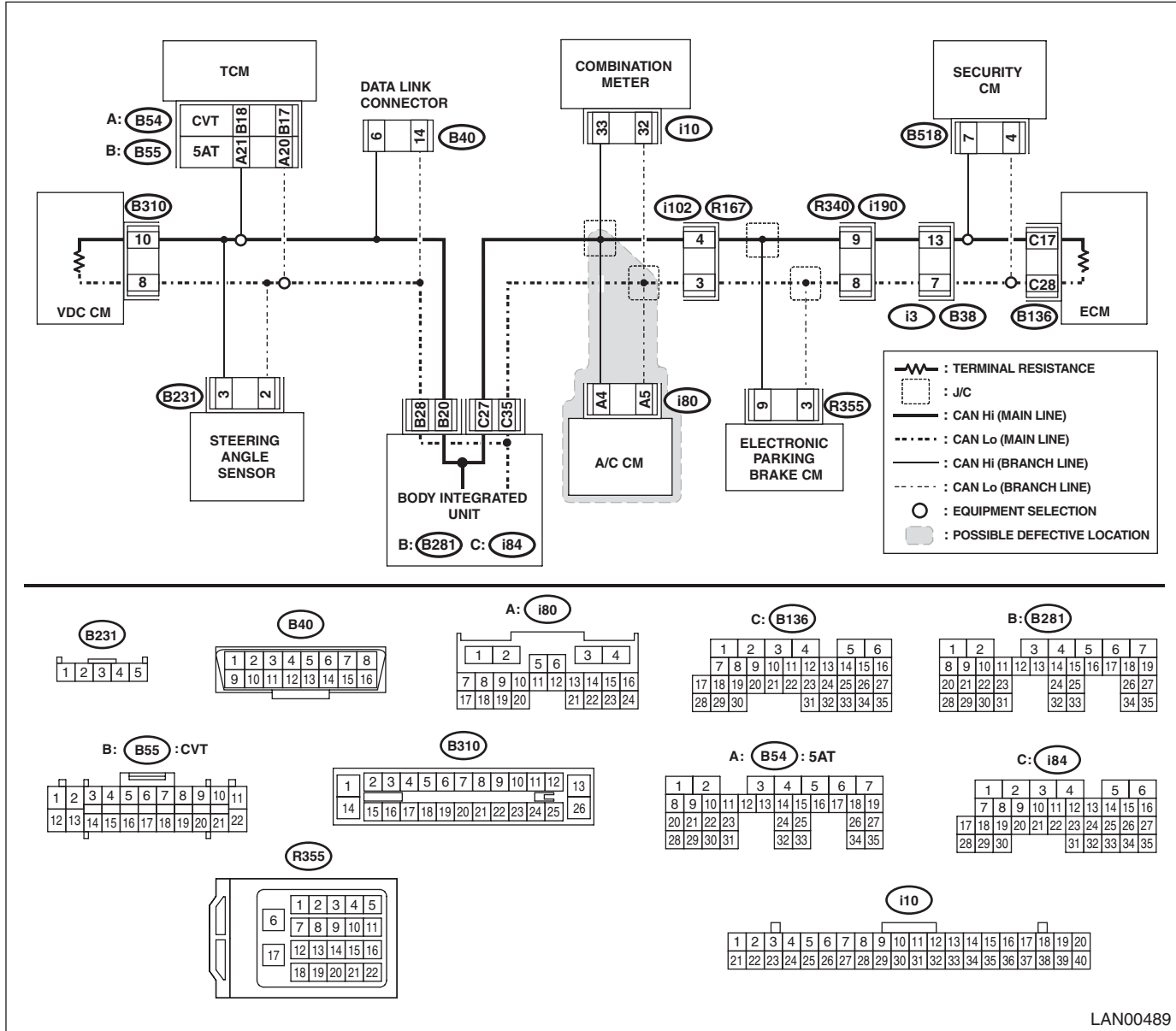
DTC DETECTING CONDITION:

No data received from A/C CM.

TROUBLE SYMPTOM:

Cooperation control of air conditioner does not operate properly.

WIRING DIAGRAM:



LAN00489

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U122B a current malfunction?	Go to step 3. Go to step 4.
3	CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U122B a current malfunction?	Replace the A/C CM. <Ref. to AC-46, REMOVAL, Control Unit.> Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
4 CHECK A/C CM. 1) Disconnect the A/C CM connector. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U122B?	Go to step 5.	Replace the A/C CM. <Ref. to AC-46, REMOVAL, Control Unit.>
5 CHECK A/C CM. 1) Connect the A/C CM connector. 2) Using the Subaru Select Monitor, read DTC of A/C CM. <Ref. to AC(diag)-25, OPERATION, Subaru Select Monitor.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Q: DTC U122C CAN-HS SCU NO-RECEIVE DATA

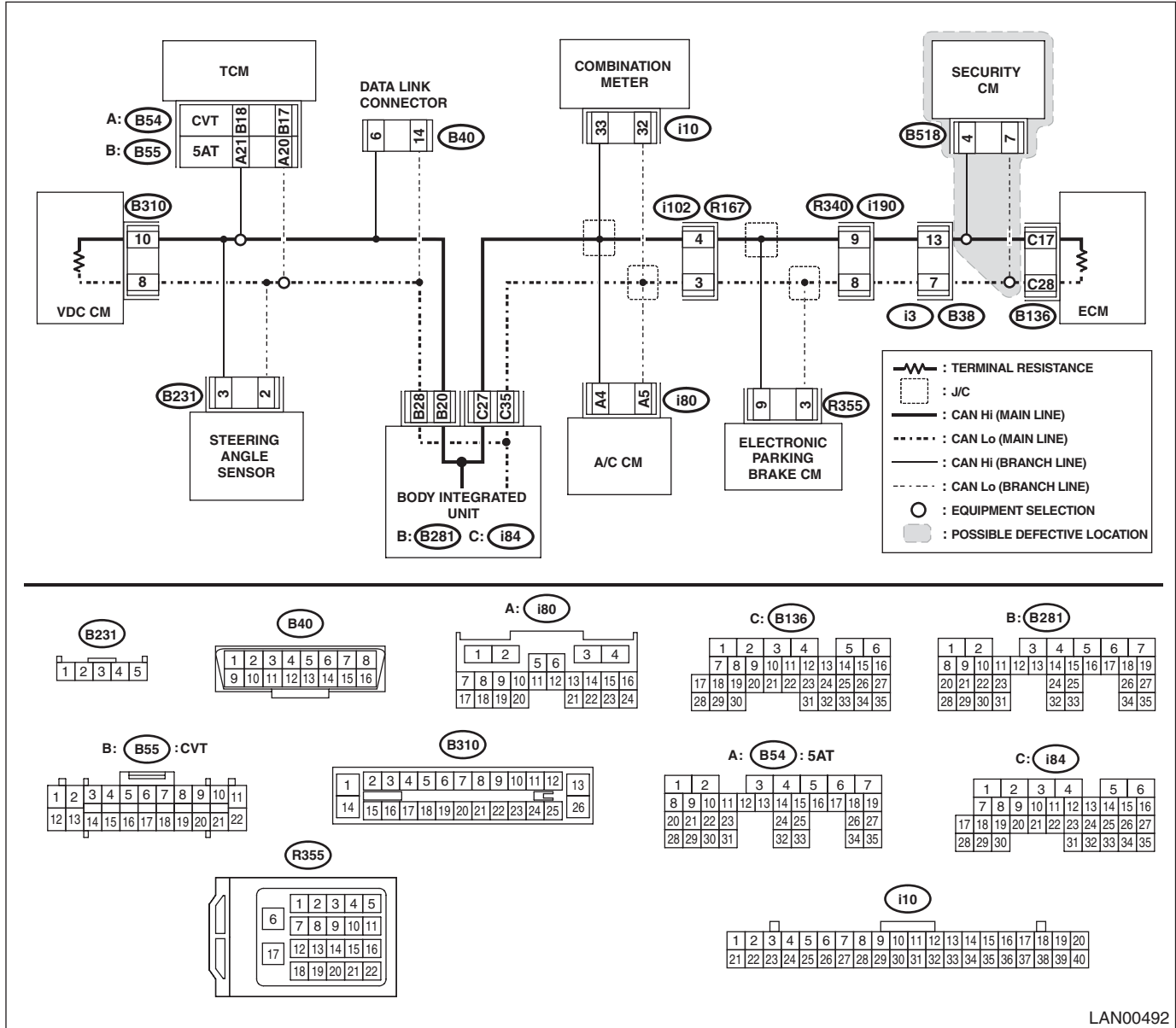
DTC DETECTING CONDITION:

No data received from SCM.

TROUBLE SYMPTOM:

Immobilizer does not operate normally.

WIRING DIAGRAM:



LAN00492

Step	Check	Yes	No
1	CHECK DTC. Using the Subaru Select Monitor, read all DTCs.	Is there DTC other than CAN system?	Perform the diagnosis according to DTCs for other control modules. Go to step 2.
2	CHECK DTC. Check DTC indicated in CAN system.	Is U122C a current malfunction?	Go to step 3. Go to step 4.
3	CHECK DTC. Turn the ignition switch to OFF, and read the DTC again.	Is U122C a current malfunction?	Replace SCM. <Ref. to SL-66, REMOVAL, Security Control Module.> Go to step 4.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

LAN SYSTEM (DIAGNOSTICS)

Step	Check	Yes	No
4 CHECK SCM. 1) Disconnect the connector from SCM. 2) Using the Subaru Select Monitor, perform the clear memory. 3) Using the Subaru Select Monitor, read DTC of CAN system.	Is the displayed DTC other than U122C?	Go to step 5.	Replace SCM. <Ref. to SL-66, REMOVAL, Security Control Module.>
5 CHECK SCM. 1) Connect the SCM connector. 2) Using the Subaru Select Monitor, read DTC of immobilizer. <Ref. to IM(diag)-8, OPERATION, Subaru Select Monitor.>	Is DTC other than CAN system displayed?	Perform the diagnosis according to DTC.	Replace the body integrated unit. <Ref. to SL-72, REMOVAL, Body Integrated Unit.>