

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

12. Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC C0021 FRONT ABS WHEEL SPEED SENSOR RH POWER SUPPLY MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0027 "REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION". <Ref. to VDC(diag)-43, DTC C0027 REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

B: DTC C0023 FRONT ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0027 "REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION". <Ref. to VDC(diag)-43, DTC C0027 REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

C: DTC C0025 REAR ABS WHEEL SPEED SENSOR RH POWER SUPPLY MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0027 "REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION". <Ref. to VDC(diag)-43, DTC C0027 REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

D: DTC C0027 REAR ABS WHEEL SPEED SENSOR LH POWER SUPPLY MALFUNCTION

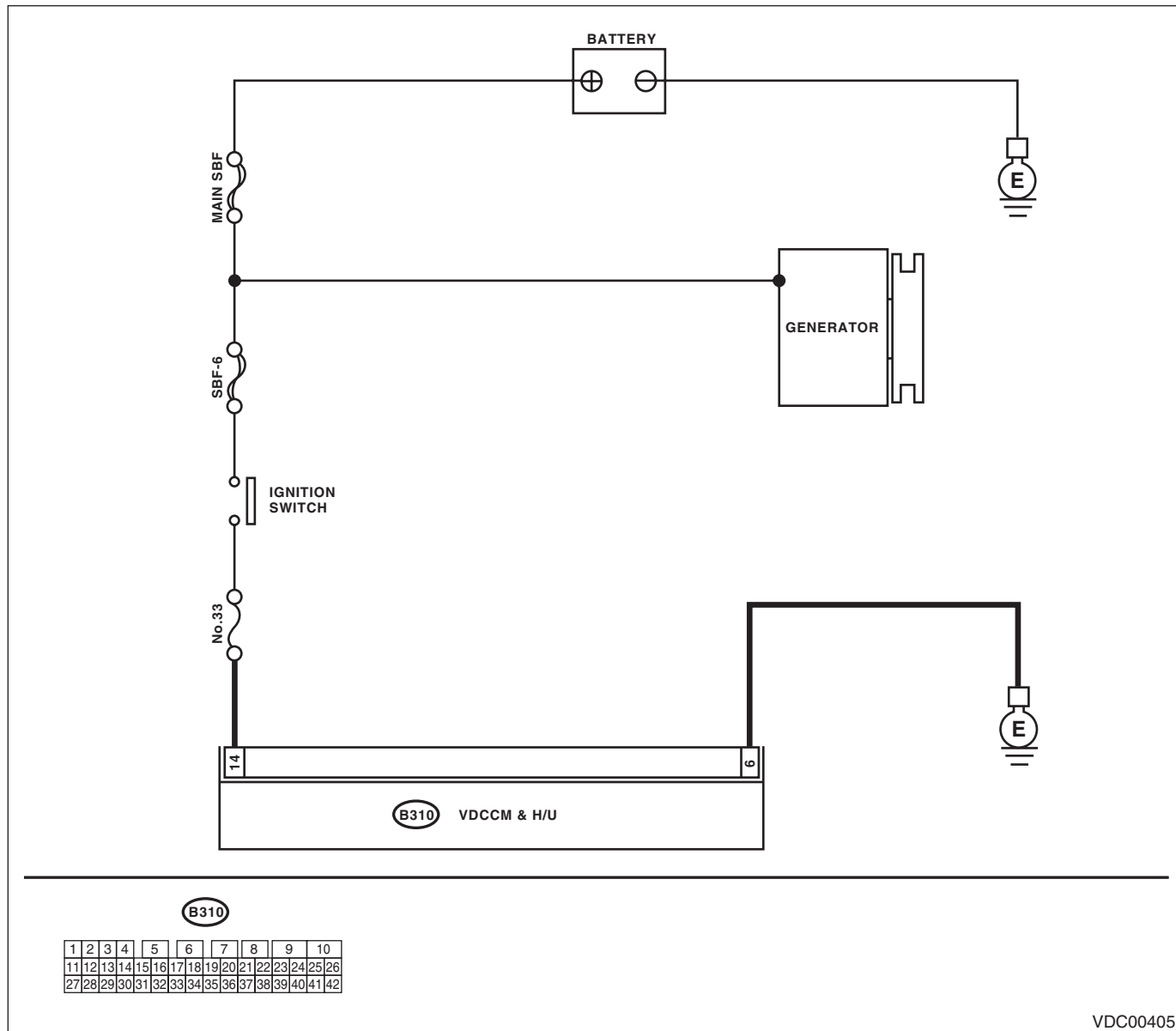
DTC DETECTING CONDITION:

Defective ABS wheel speed sensor

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT IN CONNECTOR. Check if there is poor contact in VDCCM&H/U power supply circuit.	Is there poor contact?	Repair the connector.	Go to step 2.
2 CHECK THE VDCCM&H/U POWER SUPPLY CIRCUIT. 1) Turn the ignition switch to OFF. 2) Disconnect the VDCCM&H/U connector. 3) Turn the ignition switch to ON. 4) Measure the voltage between VDCCM&H/U connector terminals. Terminals (B310) No. 14 (+) — (B310) No. 6 (-):	Is the voltage 10 — 15 V?	Go to step 3.	Check the generator, battery and VDCCM&H/U power supply circuit.
3 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U.	Go to step 4.
4 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

E: DTC C0021 OPEN/HIGH INPUT OF FRONT ABS WHEEL SPEED SENSOR RH

NOTE:

For the diagnostic procedure, refer to DTC C0027 “OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH”. <Ref. to VDC(diag)-45, DTC C0027 OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

F: DTC C0023 OPEN/HIGH INPUT OF FRONT ABS WHEEL SPEED SENSOR LH

NOTE:

For the diagnostic procedure, refer to DTC C0027 “OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH”. <Ref. to VDC(diag)-45, DTC C0027 OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

G: DTC C0025 OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR RH

NOTE:

For the diagnostic procedure, refer to DTC C0027 “OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH”. <Ref. to VDC(diag)-45, DTC C0027 OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

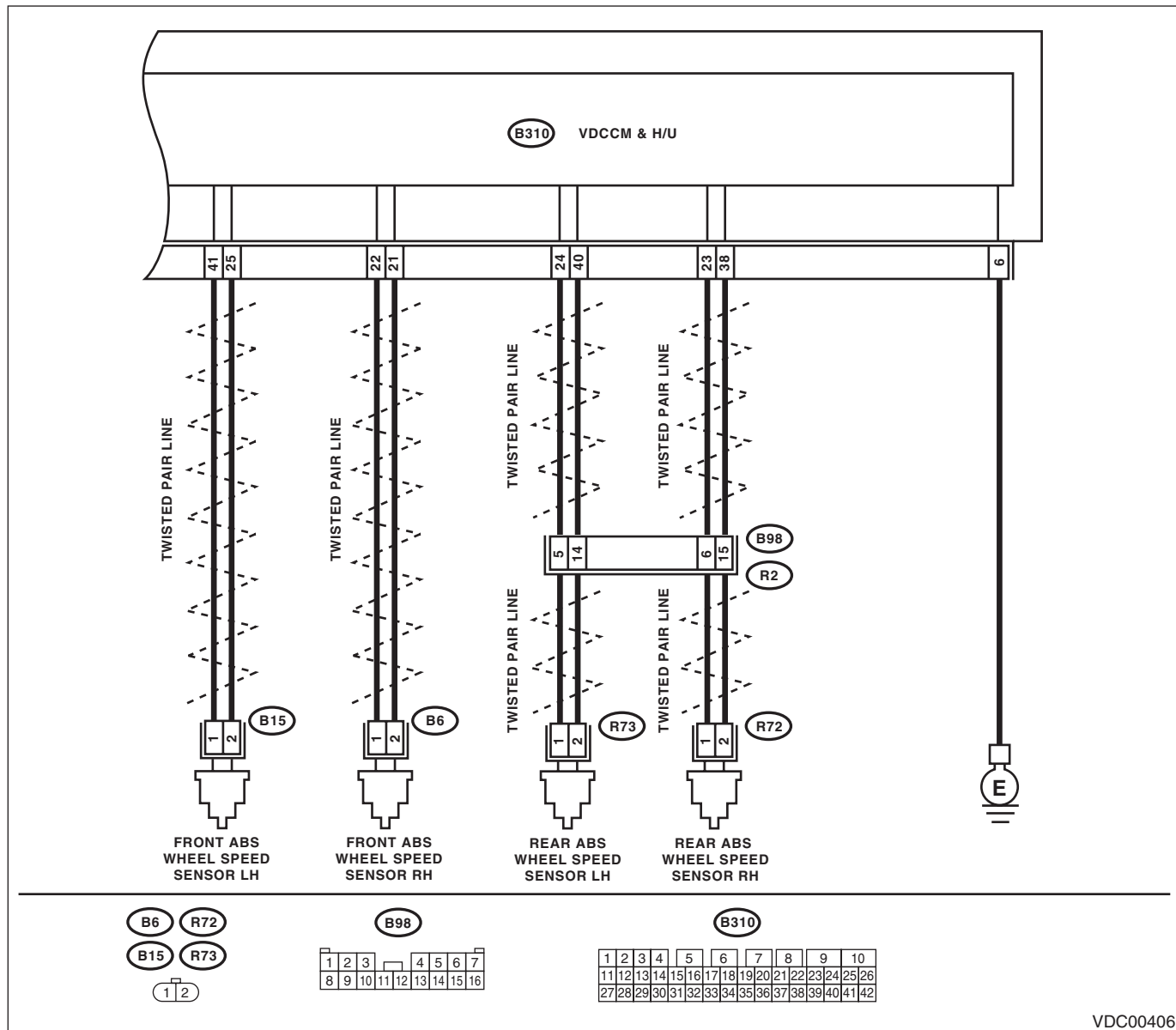
H: DTC C0027 OPEN/HIGH INPUT OF REAR ABS WHEEL SPEED SENSOR LH DTC DETECTING CONDITION:

- Defective ABS wheel speed sensor (broken wire, input voltage too high)
- Defective harness connector

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



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Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT IN CONNECTOR. Check if there is poor contact between VDCCM&H/U and ABS wheel speed sensor.	Is there poor contact?	Repair the connector.	Go to step 2.
2 CHECK HARNESS CONNECTOR BETWEEN VDCCM&H/U AND ABS WHEEL SPEED SENSOR. 1) Disconnect the connector (B310) from the VDCCM&H/U. 2) Disconnect the connector from ABS wheel speed sensor. 3) Measure the resistance between VDCCM&H/U connector and ABS wheel speed sensor connector. Connector & terminal DTC C0021 (B310) No. 22 — (B6) No. 1: (B310) No. 21 — (B6) No. 2: DTC C0023 (B310) No. 41 — (B15) No. 1: (B310) No. 25 — (B15) No. 2: DTC C0025 (B310) No. 23 — (R72) No. 1: (B310) No. 38 — (R72) No. 2: DTC C0027 (B310) No. 24 — (R73) No. 1: (B310) No. 40 — (R73) No. 2:	Is the resistance less than 0.5 Ω ?	Go to step 3.	Repair the harness connector between VDCCM&H/U and ABS wheel speed sensor.
3 CHECK GROUND SHORT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal DTC C0021 (B310) No. 21 — Chassis ground: DTC C0023 (B310) No. 25 — Chassis ground: DTC C0025 (B310) No. 38 — Chassis ground: DTC C0027 (B310) No. 40 — Chassis ground:	Is the resistance more than 1 M Ω ?	Go to step 4.	Repair the harness connector between VDCCM&H/U and ABS wheel speed sensor.
4 CHECK ABS WHEEL SPEED SENSOR POWER SUPPLY CIRCUIT. 1) Connect the VDCCM&H/U connector. 2) Turn the ignition switch to ON. 3) Measure the voltage between ABS wheel speed sensor connector and chassis ground. Connector & terminal DTC C0021 (B6) No. 1 (+) — Chassis ground (-): DTC C0023 (B15) No. 1 (+) — Chassis ground (-): DTC C0025 (R72) No. 1 (+) — Chassis ground (-): DTC C0027 (R73) No. 1 (+) — Chassis ground (-):	Is the voltage 5 — 16 V?	Go to step 6.	Go to step 5.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
5 CHECK THE VDCCM&H/U POWER SUPPLY CIRCUIT. 1) Turn the ignition switch to OFF. 2) Disconnect the VDCCM&H/U connector. 3) Turn the ignition switch to ON. 4) Measure the voltage between VDCCM&H/U connector terminals. Connector & terminal (B310) No. 14 (+) — (B310) No. 6 (-):	Is the voltage 10 — 15 V?	Go to step 7.	Check the generator, battery and VDCCM&H/U power supply circuit.
6 CHECK ABS WHEEL SPEED SENSOR SIGNAL. 1) Install the ABS wheel speed sensor. 2) Prepare an oscilloscope. 3) Check the ABS wheel speed sensor. <Ref. to ABS-15, ABS WHEEL SPEED SENSOR, INSPECTION, Rear ABS Wheel Speed Sensor.>	Is the pattern the same waveform as shown in the figure?	Go to step 7.	Replace the ABS wheel speed sensor.
7 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to VDC(diag)-25, PROCEDURE, Inspection Mode.> 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 8.
8 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

I: DTC C0022 FRONT ABS WHEEL SPEED SENSOR RH SIGNAL MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0028 “REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION”. <Ref. to VDC(diag)-48, DTC C0028 REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

J: DTC C0024 FRONT ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0028 “REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION”. <Ref. to VDC(diag)-48, DTC C0028 REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

K: DTC C0026 REAR ABS WHEEL SPEED SENSOR RH SIGNAL MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0028 “REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION”. <Ref. to VDC(diag)-48, DTC C0028 REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

L: DTC C0028 REAR ABS WHEEL SPEED SENSOR LH SIGNAL MALFUNCTION

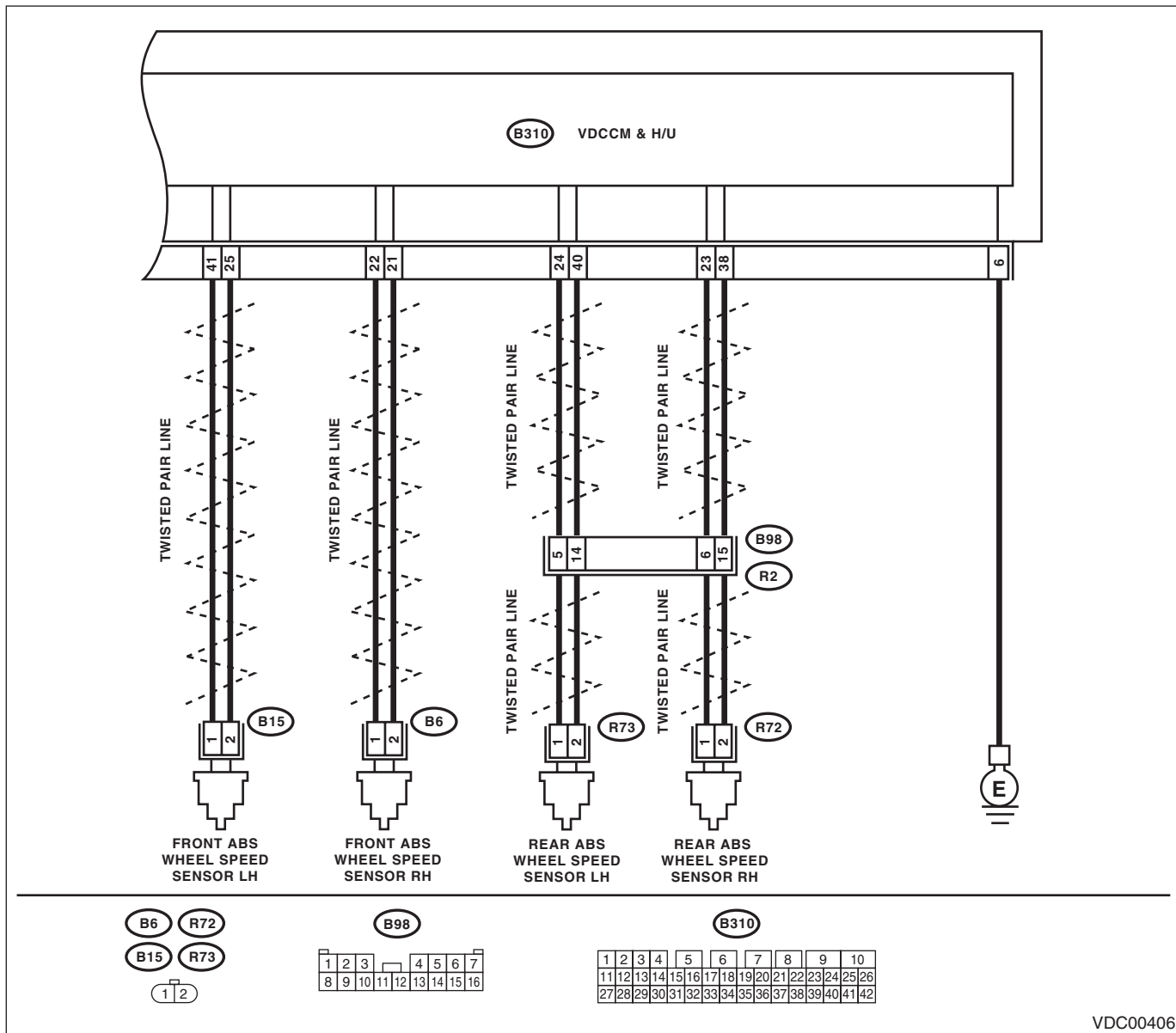
DTC DETECTING CONDITION:

- Defective ABS wheel speed sensor signal (noise, irregular signal, etc.)
- Defective harness connector

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



VDC00406

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No	
1	CHECK OUTPUT OF ABS WHEEL SPEED SENSOR USING SUBARU SELECT MONITOR. 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Read the ABS wheel speed sensor output corresponding to the faulty wheel in Subaru Select Monitor data display mode.	Does the speed indicated on the display change in response to the speedometer reading during acceleration/deceleration when the steering wheel is in the straight-ahead position?	Go to step 2.	Go to step 7.
2	CHECK POOR CONTACT IN CONNECTOR. Turn the ignition switch to OFF.	Is there poor contact in connectors between VDCCM&H/U and ABS wheel speed sensor?	Repair the connector.	Go to step 3.
3	CHECK CAUSE OF SIGNAL NOISE. Make sure the radio wave devices and electric components are installed correctly.	Are the radio wave devices and electric components installed correctly?	Go to step 4.	Install the radio wave devices and electric components properly.
4	CHECK CAUSE OF SIGNAL NOISE. Check if the noise sources (such as an antenna) are installed near the sensor harness.	Are noise sources installed?	Install the noise sources apart from sensor harness.	Go to step 5.
5	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to VDC(diag)-25, PROCEDURE, Inspection Mode.> 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 6.
6	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.
7	CHECK INSTALLATION OF ABS WHEEL SPEED SENSOR.	Is the ABS wheel speed sensor installation bolt tightened 7.5 N·m (0.76 kgf·m, 5.5 ft·lb)?	Go to step 8.	Tighten the ABS wheel speed sensor installation bolts.
8	CHECK ABS WHEEL SPEED SENSOR SIGNAL. 1) Install the ABS wheel speed sensor. 2) Prepare an oscilloscope. 3) Check the ABS wheel speed sensor. <Ref. to ABS-14, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>	Does the oscilloscope indicate the waveform pattern like shown in the figure when the tire is slowly turned? Does the oscilloscope indication repeat the waveform pattern like shown in the figure when the tire is slowly turned in equal speed for more one rotation?	Go to step 10.	Go to step 9.
9	CHECK ABS WHEEL SPEED SENSOR OR MAGNETIC ENCODER.	Are there foreign matter, breakage or damage at the tip of ABS wheel speed sensor or magnetic encoder?	Remove dirt thoroughly. Also replace the ABS wheel speed sensor or magnetic encoder as a unit with hub unit bearing if it is broken or damaged.	Go to step 10.
10	CHECK CAUSE OF SIGNAL NOISE. Make sure the radio wave devices and electric components are installed correctly.	Are the radio wave devices and electric components installed correctly?	Go to step 11.	Install the radio wave devices and electric components properly.
11	CHECK CAUSE OF SIGNAL NOISE. Check if the noise sources (such as an antenna) are installed near the sensor harness.	Is the noise sources installed?	Go to step 12.	Install the noise sources apart from sensor harness.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
12 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to VDC(diag)-25, PROCEDURE, Inspection Mode.> 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 13.
13 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference. NOTE: Though the ABS warning light remains on at this time, it is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check the warning light goes off.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

M: DTC C0029 ABS WHEEL SPEED SENSOR SIGNAL MALFUNCTION IN ONE OF FOUR WHEELS

DTC DETECTING CONDITION:

- Defective ABS wheel speed sensor signal (noise, irregular signal, etc.)
- Defective magnetic encoder
- When a wheel is turned freely for a long time

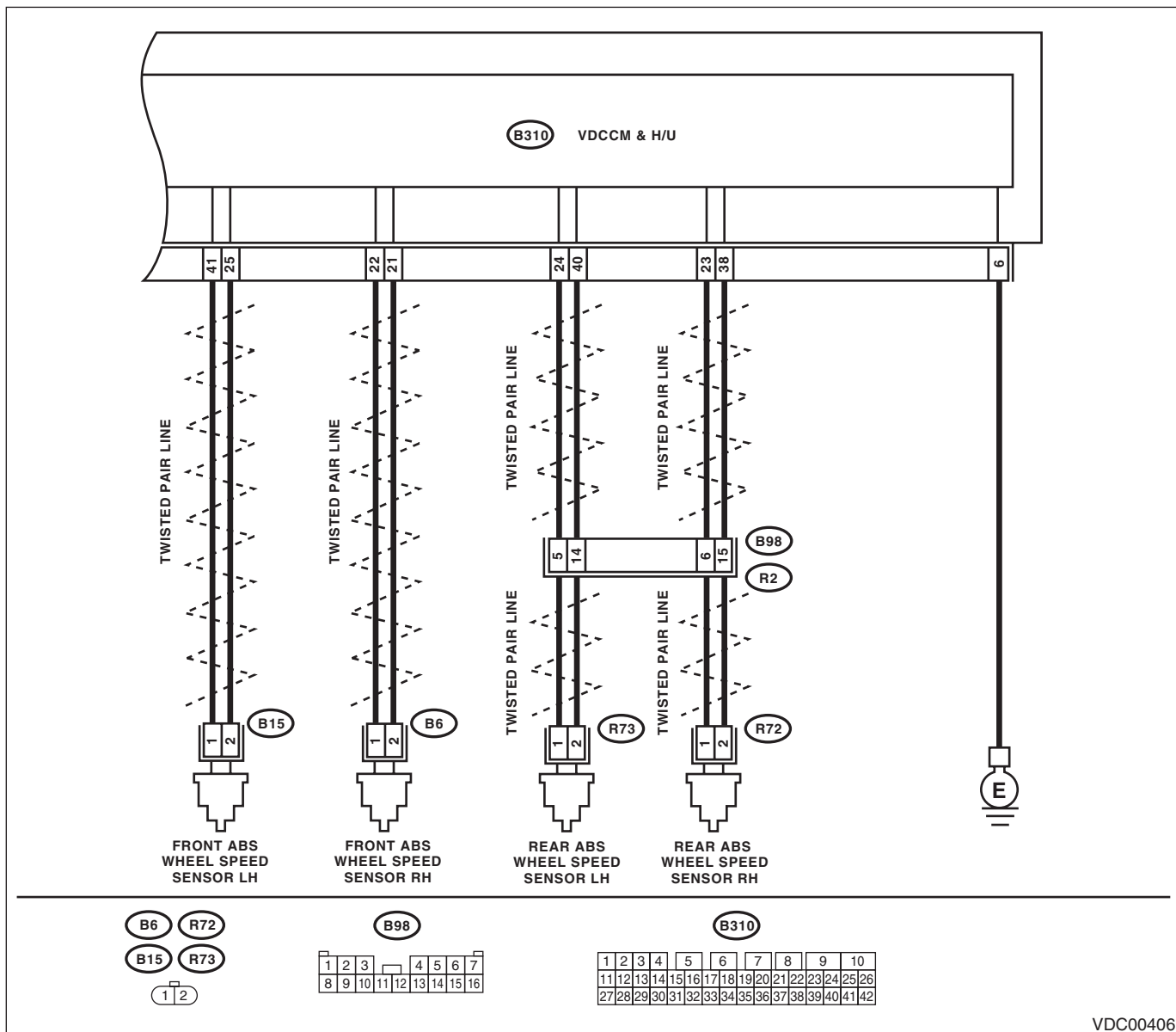
TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.
- EBD may not operate.

NOTE:

Brake warning light comes on as well as ABS warning light when EBD does not operate.

WIRING DIAGRAM:



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Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 WHETHER A WHEEL TURNED FREELY OR NOT. Check if the wheels have been turned freely for more than one minute, such as when the vehicle is jacked-up, under full-lock cornering or when the wheels are not in contact with road surface.	Did the wheels turn freely?	VDC is normal. Erase the memory. NOTE: This diagnostic trouble code may sometimes occur if the wheels turn freely for a long time, for example when the vehicle is towed or jacked-up, or when steering wheel is continuously turned all the way.	Go to step 2.
2 CHECK TIRE SPECIFICATIONS. Turn the ignition switch to OFF.	Are the tire specifications correct?	Go to step 3.	Replace the tire.
3 CHECK WEAR OF TIRE.	Is the tire worn excessively?	Replace the tire.	Go to step 4.
4 CHECK TIRE INFLATION PRESSURE.	Is the tire pressure correct?	Go to step 5.	Adjust the tire pressure.
5 CHECK INSTALLATION OF ABS WHEEL SPEED SENSOR.	Are the ABS wheel speed sensor installation bolts tightened 7.5 N·m (0.76 kgf-m, 5.5 ft-lb)? (For four wheels)	Go to step 6.	Tighten the ABS wheel speed sensor installation bolts.
6 CHECK ABS WHEEL SPEED SENSOR SIGNAL. 1) Install the ABS wheel speed sensor. 2) Prepare an oscilloscope. 3) Check the ABS wheel speed sensor. <Ref. to ABS-14, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>	Does the oscilloscope indicate the waveform pattern like shown in the figure when the tire is slowly turned? Does the oscilloscope indication repeat the waveform pattern like shown in the figure when the tire is slowly turned in equal speed for more one rotation?	Go to step 8.	Go to step 7.
7 CHECK ABS WHEEL SPEED SENSOR OR MAGNETIC ENCODER.	Are there foreign matter, breakage or damage at the tip of ABS wheel speed sensor or magnetic encoder?	Remove dirt thoroughly. Also replace the ABS wheel speed sensor or magnetic encoder as a unit with hub unit bearing if it is broken or damaged.	Go to step 8.
8 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to VDC(diag)-25, PROCEDURE, Inspection Mode.> 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 9.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No	
9	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference. NOTE: Though the ABS warning light remains on at this time, it is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check the warning light goes off.

N: DTC C0031 FRONT INLET SOLENOID VALVE RH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

O: DTC C0032 FRONT OUTLET SOLENOID VALVE RH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

P: DTC C0033 FRONT INLET SOLENOID VALVE LH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Q: DTC C0034 FRONT OUTLET SOLENOID VALVE LH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

R: DTC C0035 REAR INLET SOLENOID VALVE RH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

S: DTC C0036 REAR OUTLET SOLENOID VALVE RH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

T: DTC C0037 REAR INLET SOLENOID VALVE LH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

U: DTC C0038 REAR OUTLET SOLENOID VALVE LH MALFUNCTION IN VDC-CM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

V: DTC C0061 SECONDARY CUT VALVE MALFUNCTION IN VDCCM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

W: DTC C0062 PRIMARY CUT VALVE MALFUNCTION IN VDCCM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

X: DTC C0063 SECONDARY SUCTION VALVE MALFUNCTION IN VDCCM&H/U

NOTE:

For the diagnostic procedure, refer to DTC C0064 "PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U". <Ref. to VDC(diag)-55, DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDC-CM&H/U, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Y: DTC C0064 PRIMARY SUCTION VALVE MALFUNCTION IN VDCCM&H/U

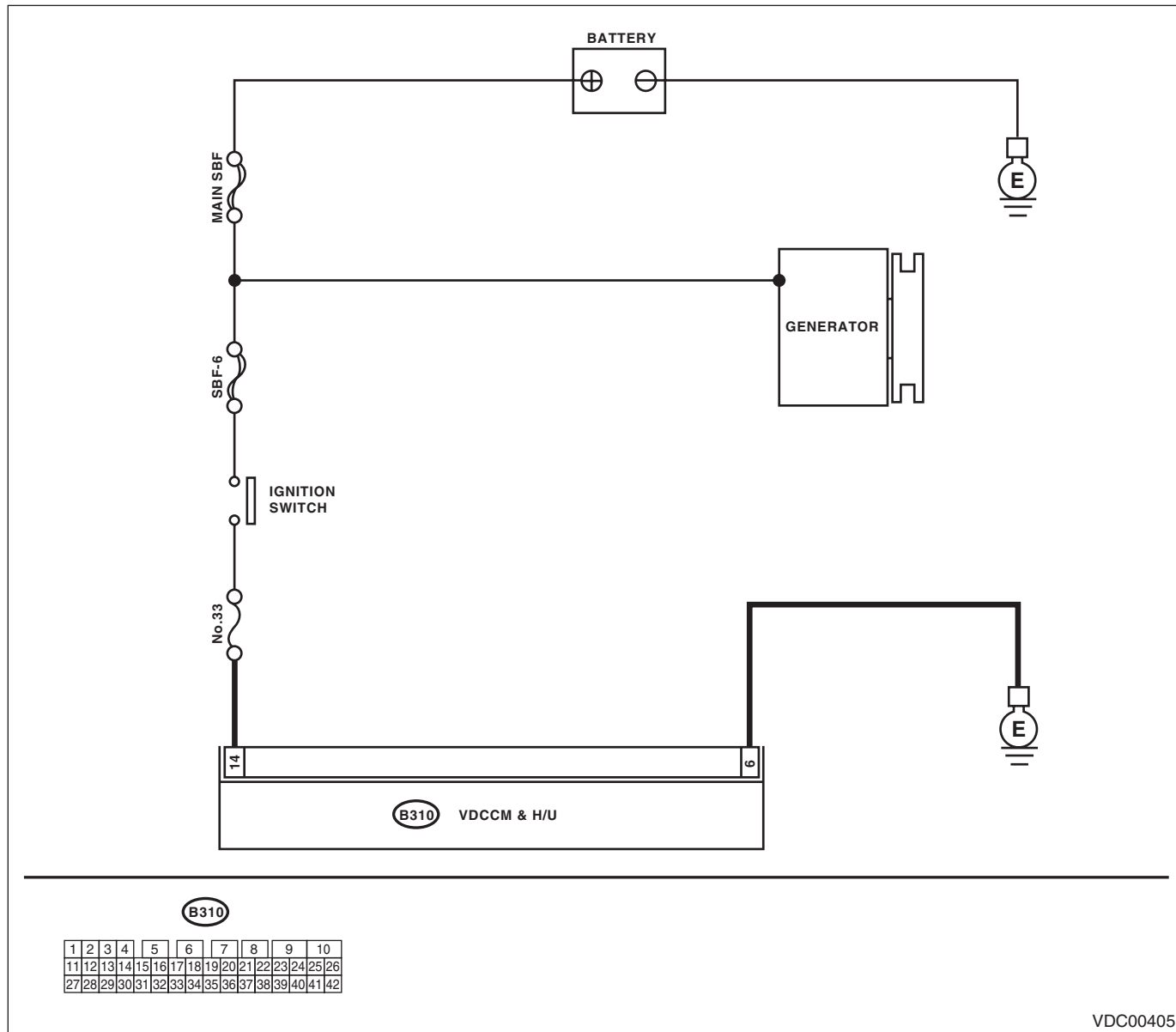
DTC DETECTING CONDITION:

- Defective harness connector
- Defective VDCH/U solenoid valve

TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U INPUT VOLTAGE. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Run the engine at idle. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 14 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the power supply circuit.
2 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 6 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 3.	Repair the VDCCM&H/U ground harness.
3 CHECK POOR CONTACT OF CONNECTORS.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 4.
4 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 5.
5 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Z: DTC C0041 VDC CONTROL MODULE MALFUNCTION

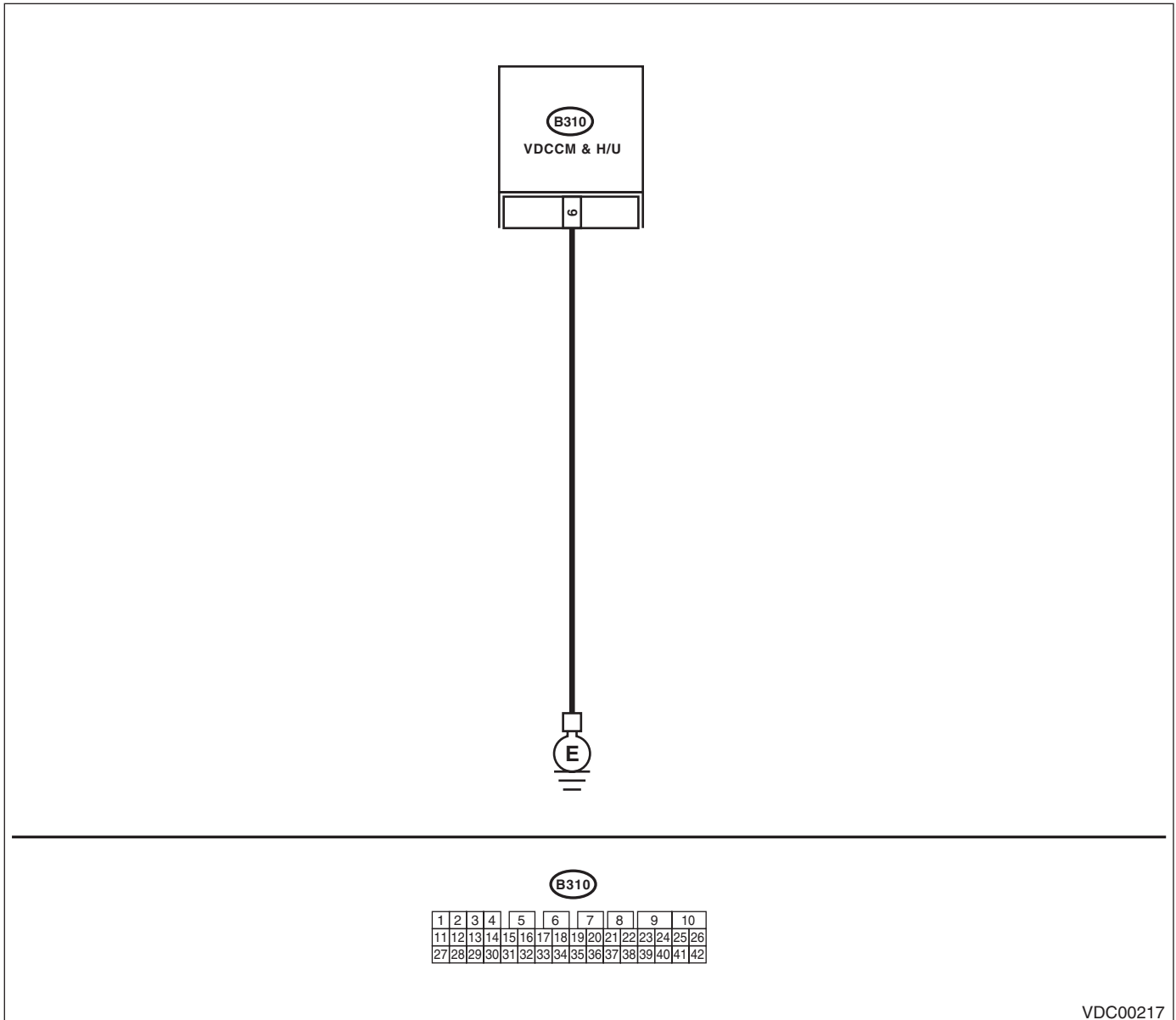
DTC DETECTING CONDITION:

Defective VDCCM&H/U

TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.
- VDC does not operate.

WIRING DIAGRAM:



VDC00217

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Measure the resistance between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 6 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 2.	Repair the VDCCM&H/U ground harness.
2 CHECK POOR CONTACT OF CONNECTORS.	Is there poor contact of the connector between the battery, ignition switch and VDCCM&H/U?	Repair the connector.	Go to step 3.
3 CHECK CAUSE OF SIGNAL NOISE.	Is the car telephone or the radio properly installed?	Go to step 4.	Install the car phone or radio properly.
4 CHECK CAUSE OF SIGNAL NOISE.	Is there a noise source (such as an antenna) installed near the sensor harness?	Install the noise sources apart from the sensor harness.	Go to step 5.
5 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 6.
6 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AA:DTC C0042 POWER VOLTAGE MALFUNCTION

DTC DETECTING CONDITION:

CHECK THE VDCCM&H/U power supply voltage.

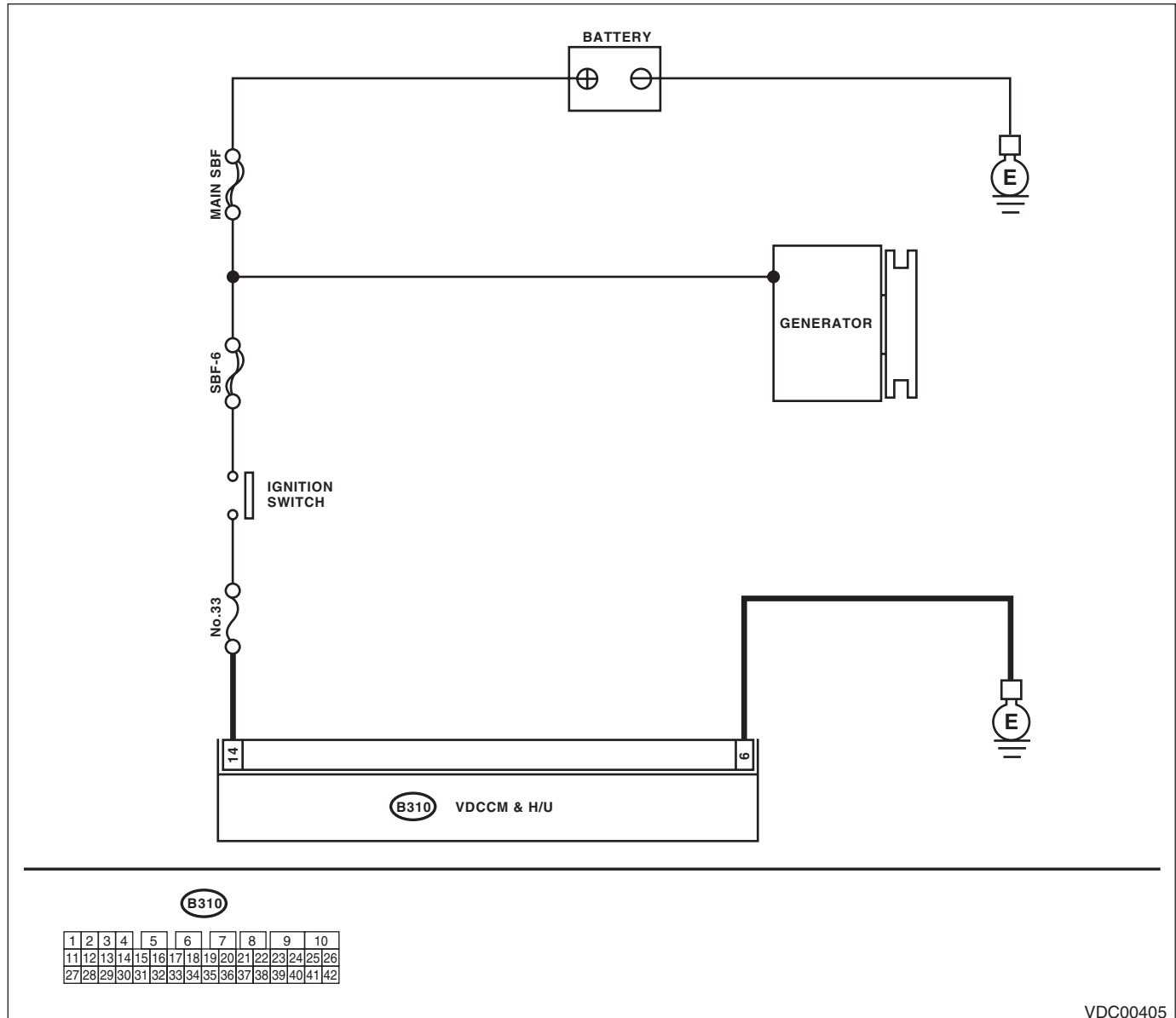
TROUBLE SYMPTOM:

- ABS does not operate.
- EBD may not operate.
- VDC does not operate.

NOTE:

Warning lights go off if voltage returns.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK GENERATOR. 1) Start the engine. 2) Run the engine at idle after warming up. 3) Measure the voltage between generator terminal B and chassis ground. <i>Terminals</i> <i>Generator B terminal (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the generator. <Ref. to SC(H4SO)-21, Generator.>
2 CHECK BATTERY TERMINAL. Turn the ignition switch to OFF.	Are the positive and negative battery terminals clamped tightly?	Go to step 3.	Tighten the terminal.
3 CHECK THE VDCCM&H/U INPUT VOLTAGE. 1) Disconnect the connector from the VDCCM&H/U. 2) Run the engine at idle. 3) Operate the devices such as headlights, air conditioner, defogger, etc. which produce much electrical loading. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 14 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Go to step 4.	Repair the power supply circuit.
4 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 6 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 5.	Repair the VDCCM&H/U ground harness.
5 CHECK POOR CONTACT OF CONNECTORS.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 6.
6 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 7.
7 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

AB:DTC C0042 ABS WHEEL SPEED SENSOR POWER MALFUNCTION

NOTE:

For the diagnostic procedure, refer to DTC C0042 "POWER VOLTAGE MALFUNCTION". <Ref. to VDC(diag)-59, DTC C0042 POWER VOLTAGE MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AC:DTC C0044 AT COMMUNICATION

DTC DETECTING CONDITION:

No CAN signal from TCM.

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

	Step	Check	Yes	No
1	CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-25, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system.	Go to step 2.
2	CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in TCM connector?	Repair the connector.	Go to step 3.
3	CHECK TCM.	Is the TCM normal?	Go to step 4.	Replace the TCM. <Ref. to 4AT-62, Transmission Control Module (TCM).> <Ref. to 5AT-56, Transmission Control Module (TCM).>
4	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U.	Go to step 5.
5	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AD:DTC C0045 DIFFERENT VDC CONTROL MODULE SPECIFICATION

DTC DETECTING CONDITION:

Different control module specification

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

Step	Check	Yes	No
1 CHECK VDCCM&H/U SPECIFICATION. Check the identification mark of the VDCCM&H/U. <i>Identification mark of VDCCM&H/U</i> <i>Wagon model OUTBACK 3.0 R: G5</i> <i>Sedan model OUTBACK 3.0 R: GB</i>	Is the identification mark of VDCCM&H/U the same as vehicle specification?	Go to step 2.	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>
2 CHECK TCM SPECIFICATION. Check the TCM specification.	Is the specification of TCM same as vehicle specification?	Go to step 3.	Replace the TCM. <Ref. to 4AT-62, Transmission Control Module (TCM).> <Ref. to 5AT-56, Transmission Control Module (TCM).>
3 CHECK AT SYSTEM. 1) Start the engine. 2) Check the DTC in AT system.	Is DTC of AT system displayed?	Repair the AT system.	Go to step 4.
4 CHECK ECM SPECIFICATION. Check the ECM specification.	Is the specification of ECM same as vehicle specification?	Go to step 5.	Replace the ECM. <Ref. to FU(H4SO)-36, Engine Control Module (ECM).> <Ref. to FU(H4DOTC)-38, Engine Control Module (ECM).> <Ref. to FU(H6DO)-33, Engine Control Module (ECM).>
5 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U.	Go to step 6.
6 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AE:DTC C0045 AT CONTROL MODULE MALFUNCTION

DTC DETECTING CONDITION:

Defective TCM

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

	Step	Check	Yes	No
1	CHECK AT SYSTEM. 1) Start the engine. 2) Check the DTC in AT system.	Is DTC of AT system displayed?	Repair the AT system.	Go to step 2.
2	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U.	Go to step 3.
3	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AF:DTC C0047 IMPROPER CAN COMMUNICATION

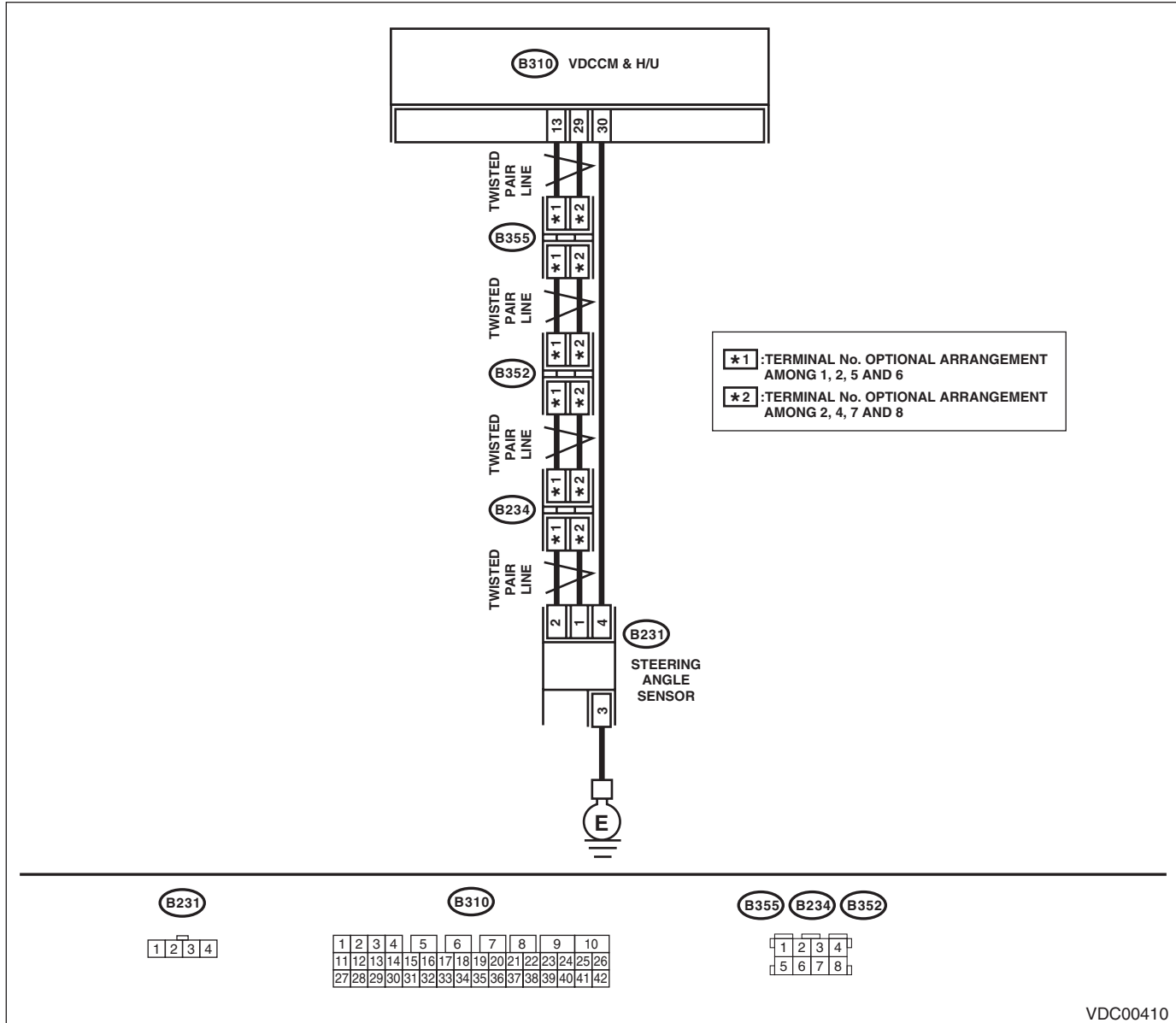
DTC DETECTING CONDITION:

CAN communication line circuit is open or shorted.

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



VDC00410

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-25, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system.	Go to step 2.
2 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in VDCCM&H/U connector?	Repair the connector.	Go to step 3.
3 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AG:DTC C0051 VALVE RELAY OFF MALFUNCTION

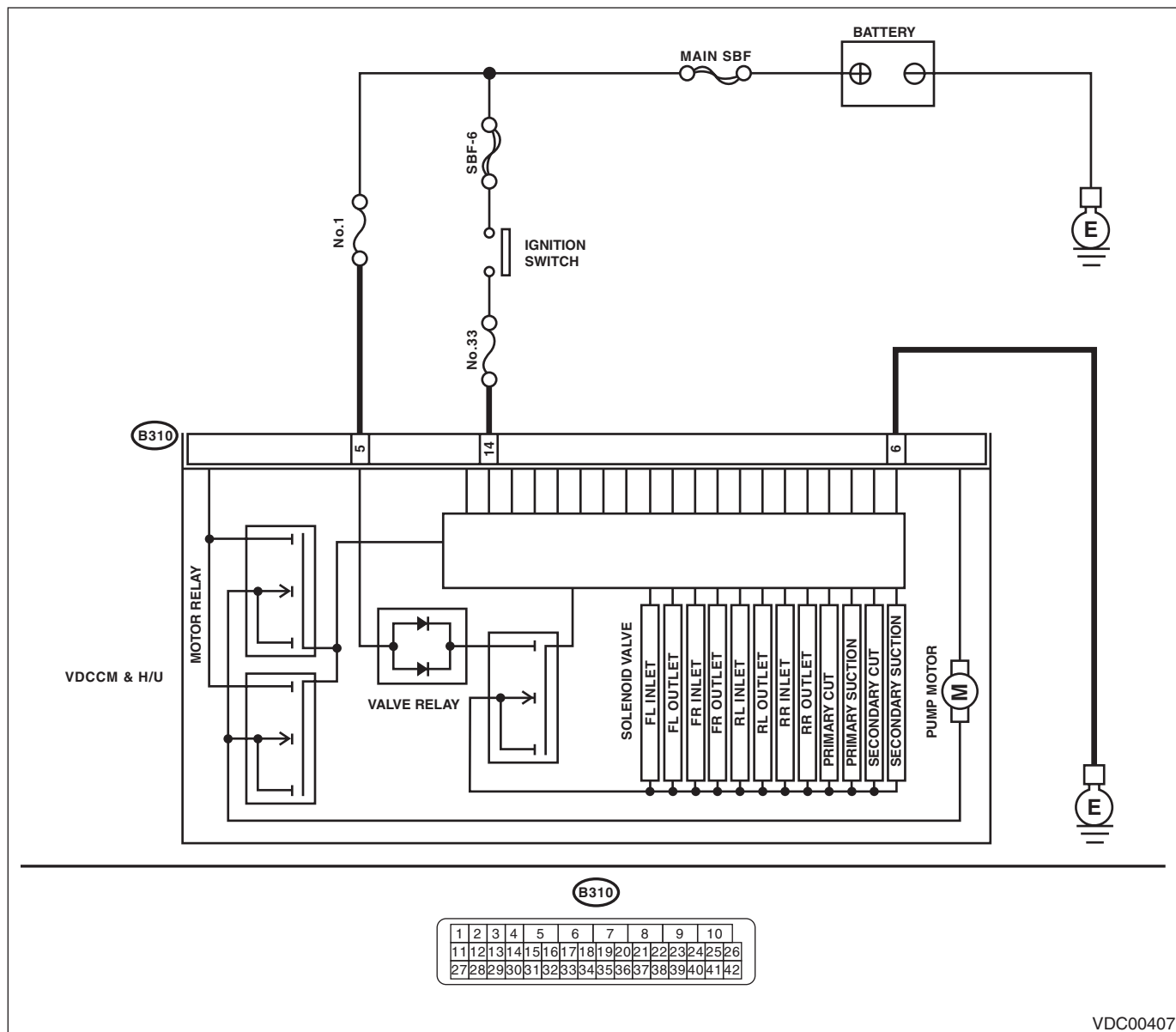
DTC DETECTING CONDITION:

Defective valve relay

TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.
- VDC does not operate.

WIRING DIAGRAM:



VDC00407

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U INPUT VOLTAGE. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Run the engine at idle. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 5 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 2.	Repair the harness connector between battery and VDCCM&H/U.
2 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 6 — Chassis ground:	Is the resistance less than 0.5 Ω ?	Go to step 3.	Repair the VDCCM&H/U ground harness.
3 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 4.
4 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 5.
5 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AH:DTC C0051 VALVE RELAY MALFUNCTION

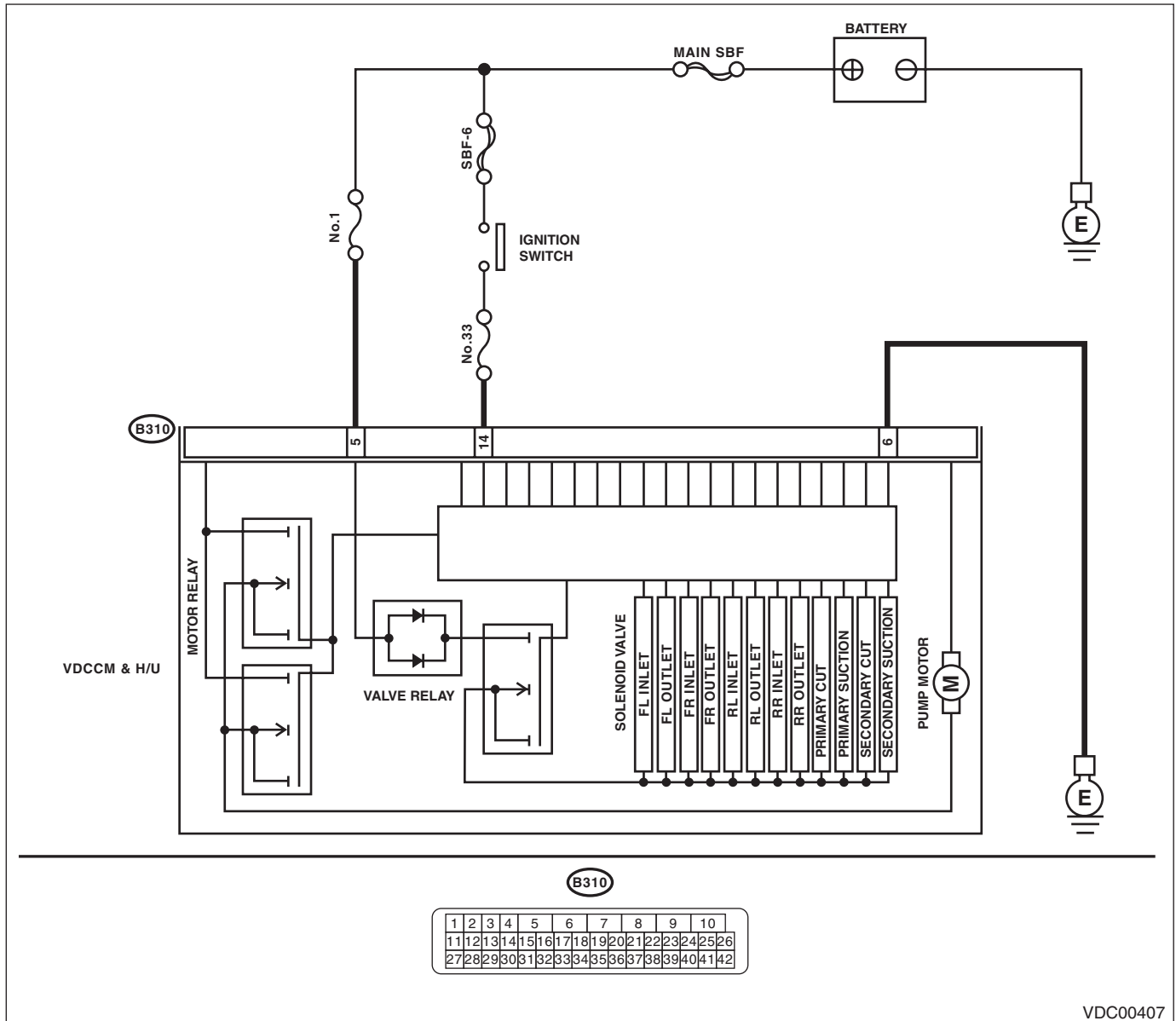
DTC DETECTING CONDITION:

Defective valve relay

TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U INPUT VOLTAGE. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Run the engine at idle. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 14 (+) — Chassis ground (-): (B310) No. 5 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 2.	Repair the power supply circuit.
2 CHECK THE VDCCM&H/U INPUT VOLTAGE. Calculate the voltage difference measured in step 1. A: (B310) No. 14 (+) — Chassis ground (-): B: (B310) No. 5 (+) — Chassis ground (-):	Is the voltage difference between A and B more than 2 V?	Repair the power supply circuit.	Go to step 3.
3 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 6 — Chassis ground:	Is the resistance less than 0.5 Ω ?	Go to step 4.	Repair the VDCCM&H/U ground harness.
4 CHECK THE VDCCM&H/U VALVE RELAY. Measure the resistance between VDCCM&H/U connector terminals. Connector & terminal (B310) No. 5 — (B310) No. 6:	Is the resistance more than 1 M Ω ?	Go to step 5.	Replace the VDCCM&H/U.
5 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 6.
6 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 7.
7 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AI: DTC C0051 VALVE RELAY TEST MALFUNCTION

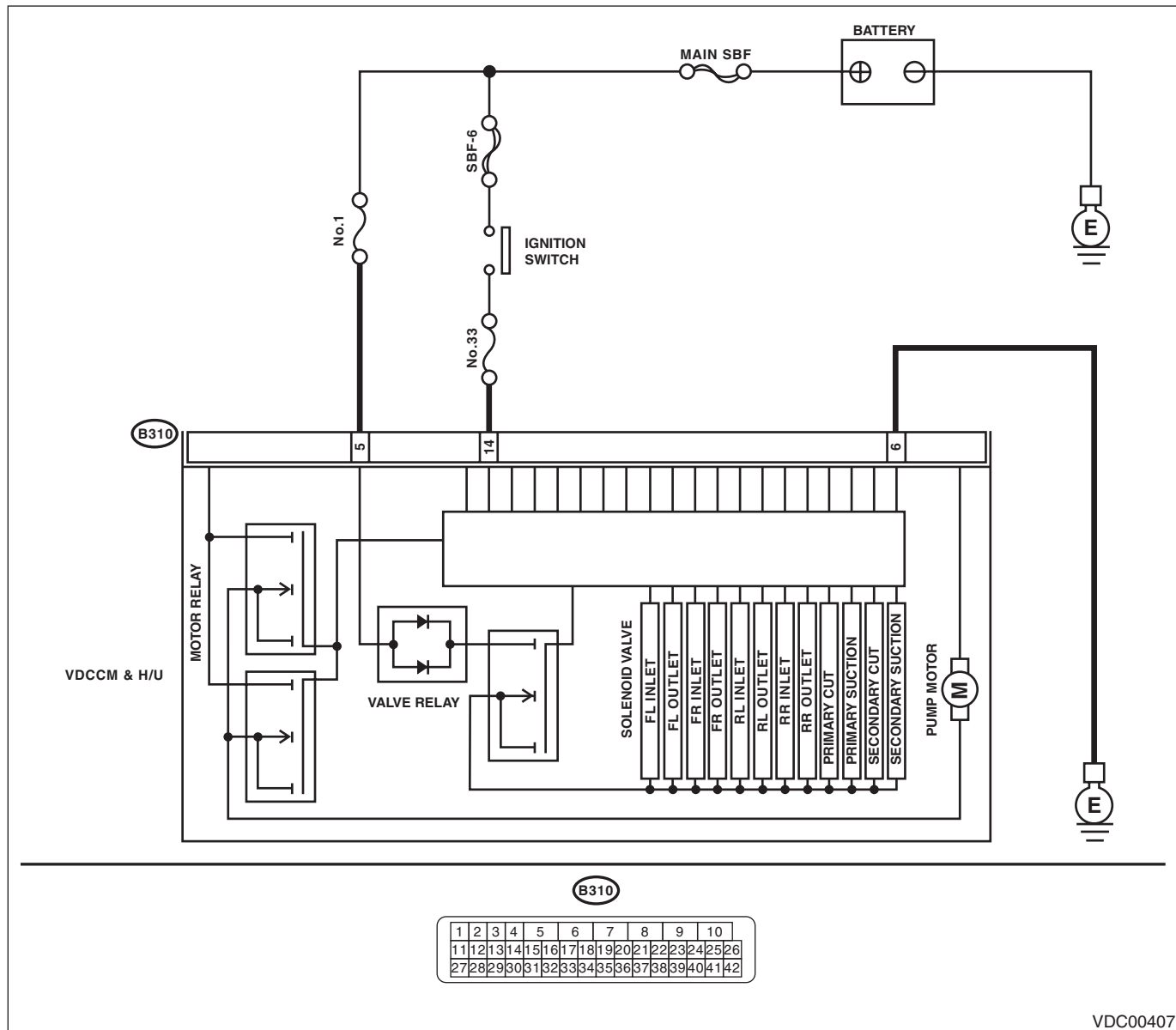
DTC DETECTING CONDITION:

Defective valve relay

TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U INPUT VOLTAGE. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Run the engine at idle. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. <i>Connector & terminal (B310) No. 5 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the VDCCM&H/U power circuit.
2 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal (B310) No. 6 — Chassis ground:</i>	Is the resistance less than 0.5 Ω?	Go to step 3.	Repair the VDCCM&H/U ground circuit.
3 CHECK THE VDCCM&H/U VALVE RELAY. Measure the resistance between VDCCM&H/U connector terminals. <i>Connector & terminal (B310) No. 5 — (B310) No. 6:</i>	Is the resistance more than 1 MΩ?	Go to step 4.	Replace the VDCCM&H/U.
4 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 5.
5 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 6.
6 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AJ:DTC C0051 VALVE RELAY ON MALFUNCTION

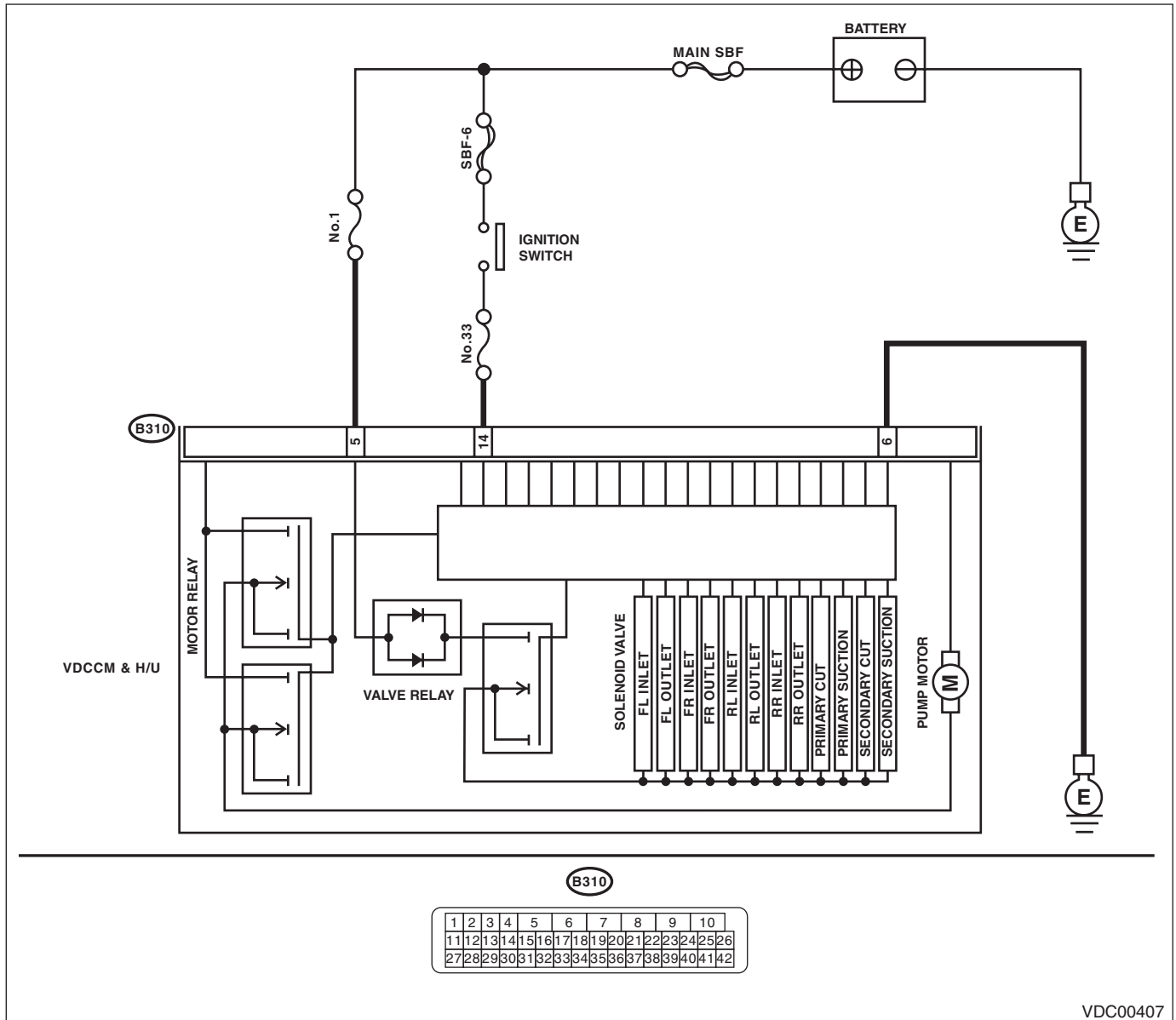
DTC DETECTING CONDITION:

Defective valve relay

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.
- EBD may not operate.

WIRING DIAGRAM:



VDC00407

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U VALVE RELAY. 1) Disconnect the connector from the VDCCM&H/U. 2) Measure the resistance between VDCCM&H/U connector terminals. <i>Terminals</i> <i>No. 5 — No. 6:</i>	Is the resistance more than 1 MΩ?	Go to step 2.	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>
2 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 3.
3 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 4.
4 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AK:DTC C0052 MOTOR/MOTOR RELAY MALFUNCTION

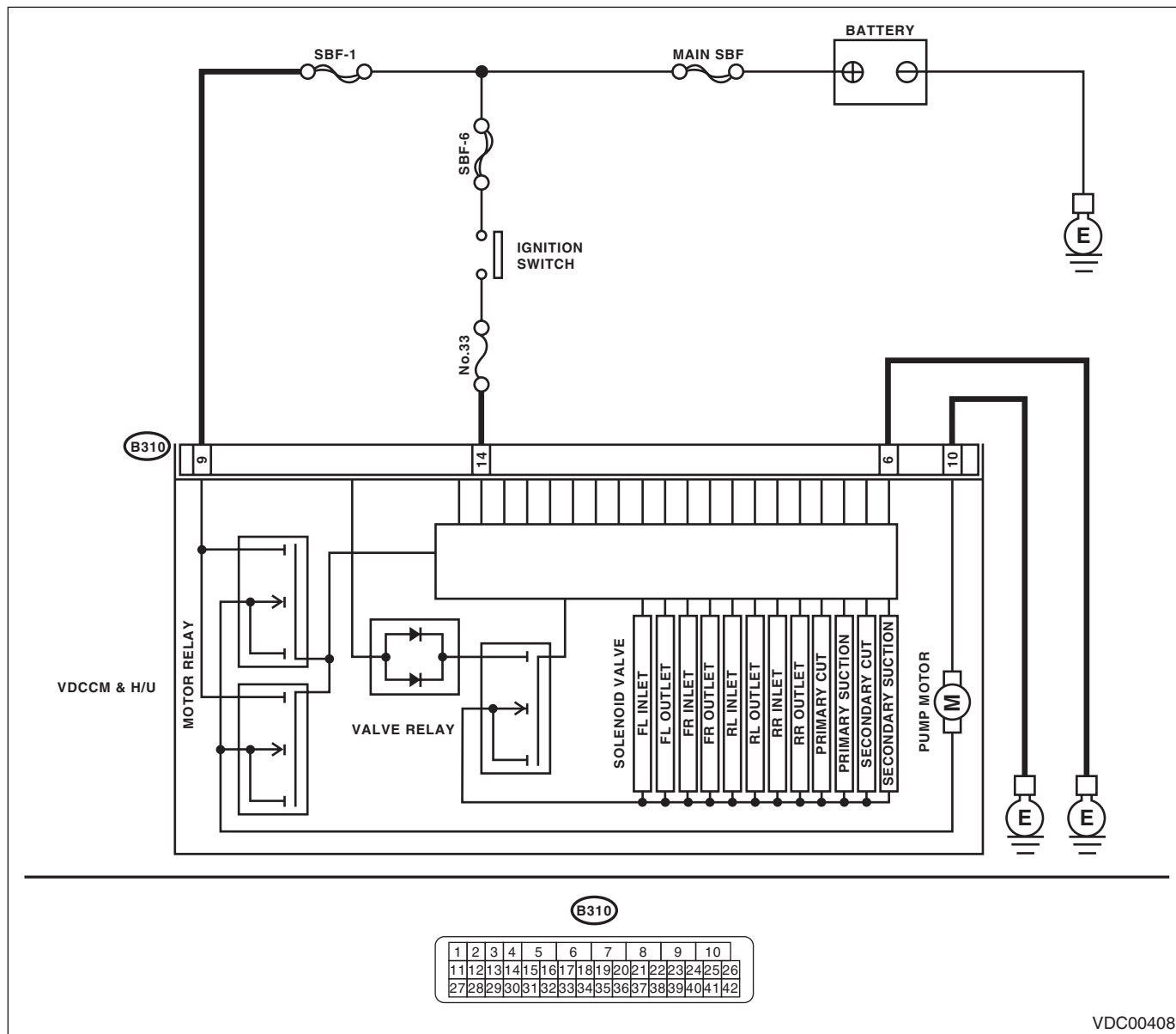
DTC DETECTING CONDITION:

- Defective motor and motor relay
- Defective harness connector

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.
- EBD may not operate.

WIRING DIAGRAM:



VDC00408

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK THE VDCCM&H/U INPUT VOLTAGE. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Turn the ignition switch to ON. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 9 (+) — Chassis ground (-): (B310) No. 14 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 2.	Repair the VDCCM&H/U power supply circuit.
2 CHECK INSTALLATION OF MOTOR GROUND.	Is the motor ground terminal installation bolt tightened 33 N·m (3.3 kgf-m, 24.3 ft-lb)?	Go to step 3.	Tighten the motor ground terminal installation bolt.
3 CHECK THE VDCCM&H/U GROUND CIRCUIT. 1) Turn the ignition switch to OFF. 2) Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 6 — Chassis ground: (B310) No. 10 — Chassis ground:	Is the resistance less than 0.5 Ω?	Go to step 4.	Repair the VDCCM&H/U ground harness.
4 CHECK VDCCM&H/U MOTOR RELAY. Measure the resistance between VDCCM&H/U connector terminals. Terminals No. 9 — No. 10:	Is the resistance more than 1 MΩ?	Go to step 5.	Replace the VDCCM&H/U.
5 CHECK POOR CONTACT IN CONNECTORS. Turn the ignition switch to OFF.	Is there poor contact in connector between generator, battery and VDCCM&H/U?	Repair the connector.	Go to step 6.
6 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 7.
7 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs. NOTE: Though the ABS warning light remains on at this time, it is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check the warning light goes off.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AL:DTC C0052 MOTOR/MOTOR RELAY OFF MALFUNCTION

DTC DETECTING CONDITION:

- Defective motor relay
- Defective harness connector

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.
- EBD may not operate.

NOTE:

For the diagnostic procedure, refer to DTC C0052 "MOTOR/MOTOR RELAY MALFUNCTION". <Ref. to VDC(diag)-74, DTC C0052 MOTOR/MOTOR RELAY MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AM:DTC C0052 MOTOR/MOTOR RELAY ON MALFUNCTION

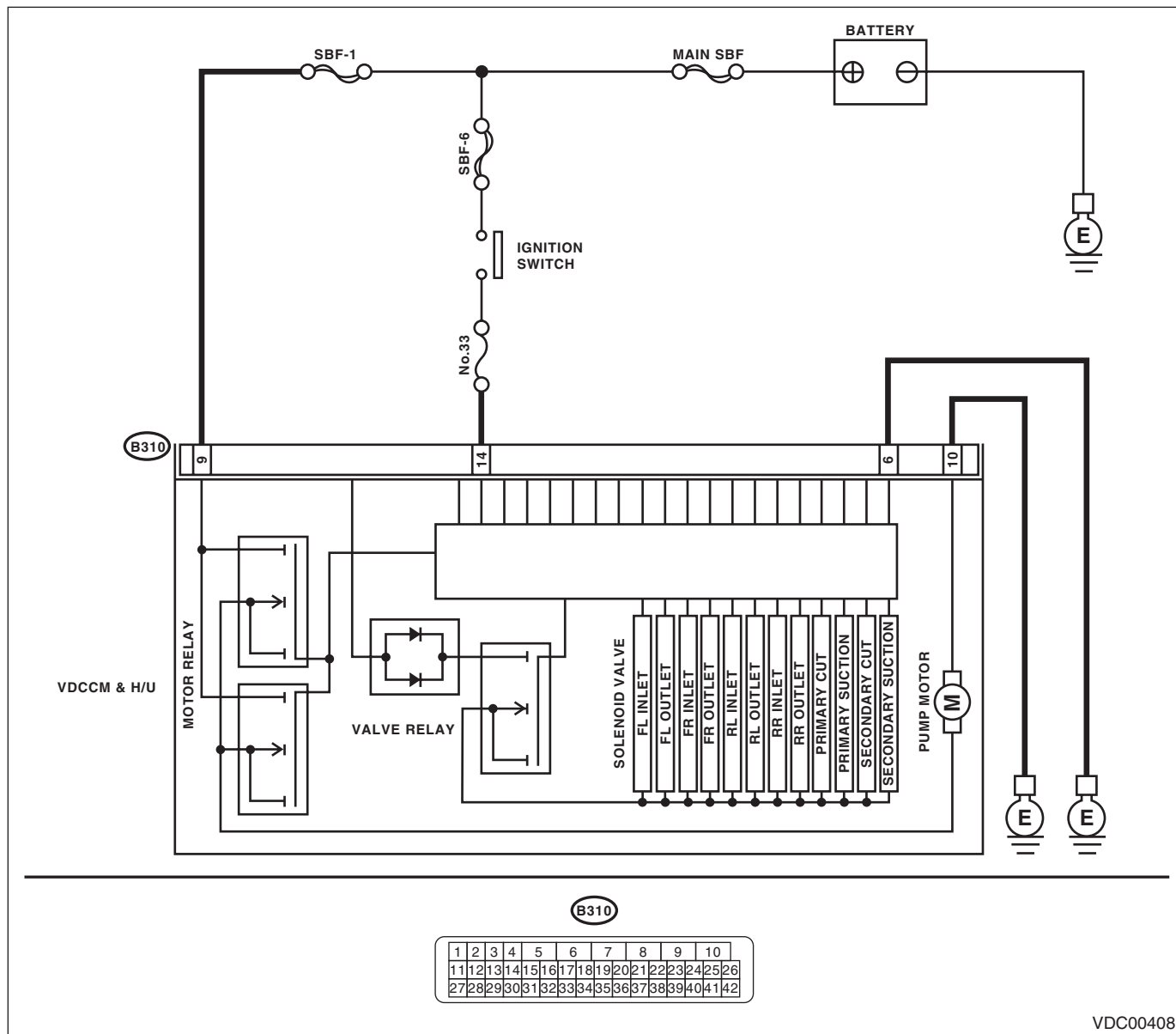
DTC DETECTING CONDITION:

- Defective motor relay
- Defective harness connector

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.
- EBD may not operate.

WIRING DIAGRAM:



VDC00408

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK VDCCM&H/U MOTOR RELAY. 1) Disconnect the connector from the VDCCM&H/U. 2) Measure the resistance between VDCCM&H/U connector terminals. Terminals No. 9 — No. 10:	Is the resistance more than 1 MΩ?	Go to step 2.	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>
2 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 3.
3 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs. NOTE: Though the ABS warning light remains on at this time, it is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check the warning light goes off.

AN:DTC C0052 MOTOR

DTC DETECTING CONDITION:

- Defective motor
- Defective motor relay
- Defective harness connector

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.
- EBD may not operate.

NOTE:

For the diagnostic procedure, refer to DTC C0052 "MOTOR/MOTOR RELAY MALFUNCTION". <Ref. to VDC(diag)-74, DTC C0052 MOTOR/MOTOR RELAY MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AO:DTC C0054 BLS OPEN CIRCUIT

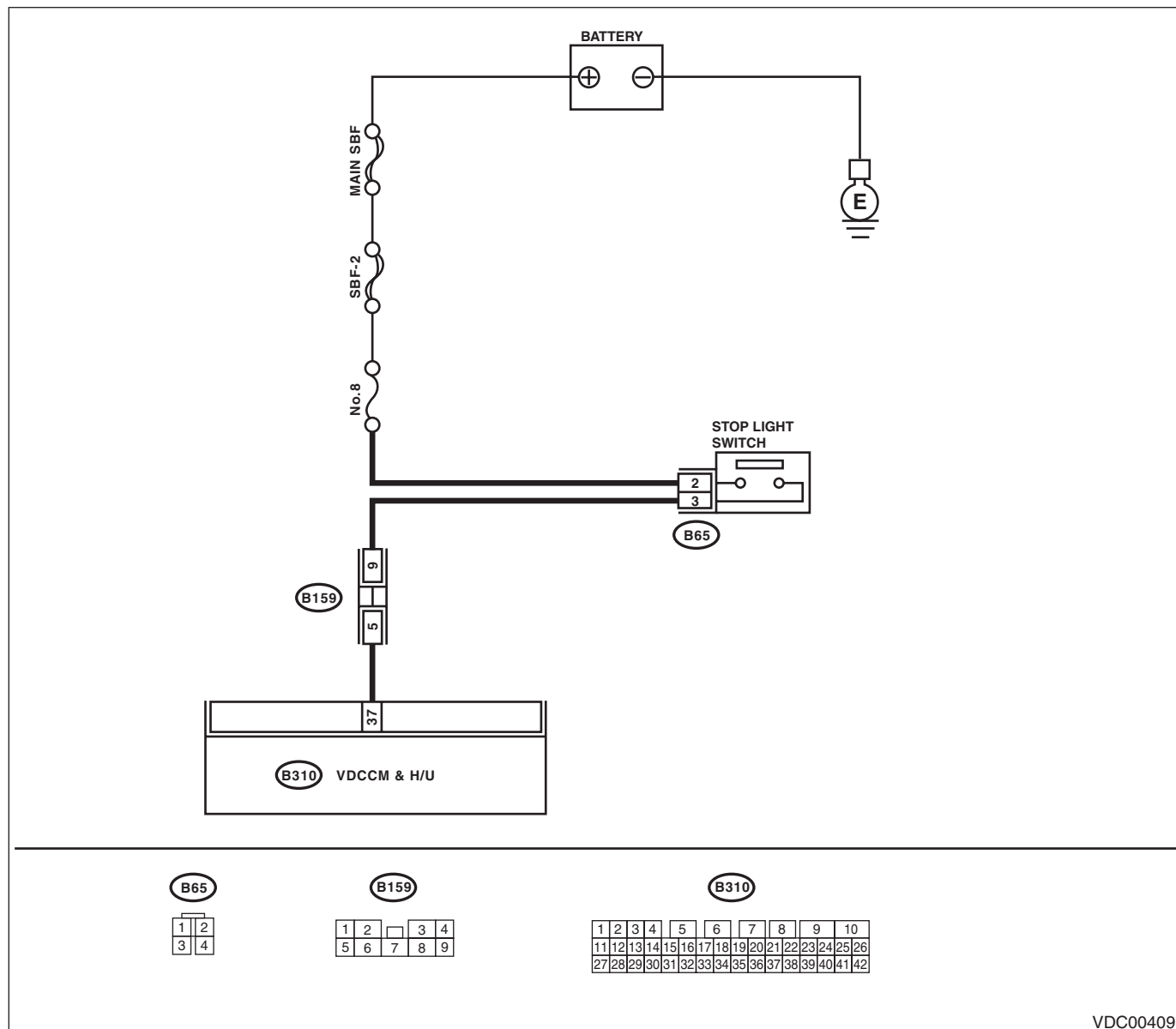
DTC DETECTING CONDITION:

Defective stop light switch

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK OUTPUT OF STOP LIGHT SWITCH WITH SUBARU SELECT MONITOR. 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Release the brake pedal. 3) Read the stop light switch output in Subaru Select Monitor.	Is OFF displayed on the display screen?	Go to step 2.	Go to step 3.
2 CHECK OUTPUT OF STOP LIGHT SWITCH WITH SUBARU SELECT MONITOR. 1) Depress the brake pedal. 2) Read the stop light switch output in Subaru Select Monitor.	Is ON displayed on the display screen?	Go to step 5.	Go to step 3.
3 CHECK IF STOP LIGHTS COME ON. Depress the brake pedal.	Does the stop light illuminate?	Go to step 4.	Repair the stop light circuit.
4 CHECK OPEN CIRCUIT OF HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Depress the brake pedal. 4) Measure the voltage between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 37 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 5.	Repair the harness between stop light switch and VDCCM&H/U connector.
5 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector between stop light switch and VDCCM&H/U?	Go to step 6.	Repair the connector.
6 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 7.
7 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AP:DTC C0054 BLS ON MALFUNCTION

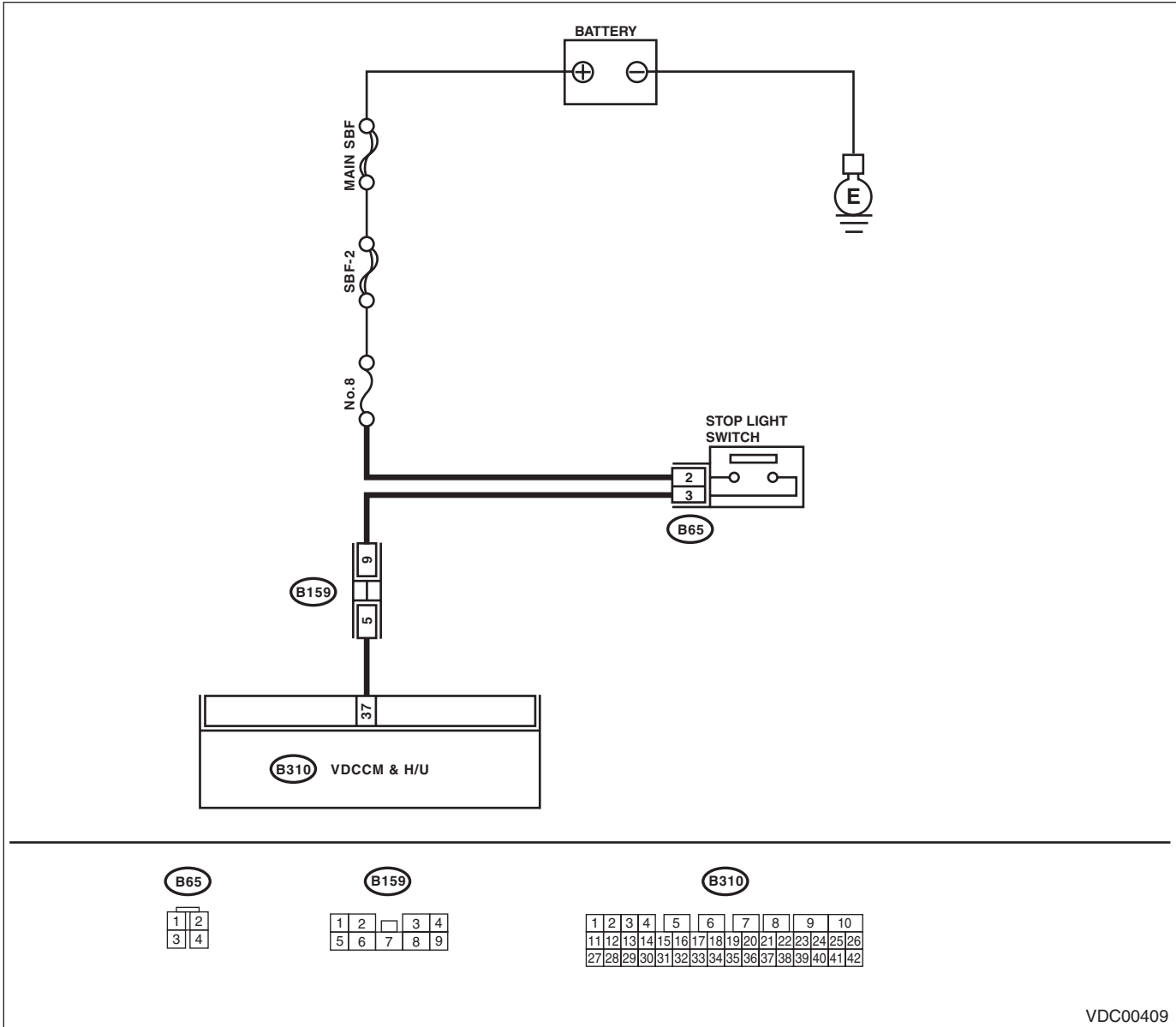
DTC DETECTING CONDITION:

Defective stop light switch

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



VDC00409

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No	
1	CHECK STOP LIGHT SWITCH. 1) Turn the ignition switch to OFF. 2) Disconnect the stop light switch connector. 3) Measure the resistance of stop light switch terminals.	Is the resistance more than 1 MΩ when switch is OFF (when pedal is not depressed)?	Go to step 2.	Replace the stop light switch.
2	INTERVIEWING CUSTOMERS. Make sure that the operation was performed in which accelerator pedal and brake pedal were depressed simultaneously (with depressing brake pedal with left foot).	Were the acceleration pedal and brake pedal depressed simultaneously?	System is normal. (DTC may be recorded while brake is applied during driving.)	Go to step 3.
3	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 4.
4	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

AQ:DTC C0057 ECM COMMUNICATION

DTC DETECTING CONDITION:

No CAN signal from ECM.

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

Step	Check	Yes	No	
1	CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-25, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system.	Go to step 2.
2	CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in ECM connector?	Repair the connector.	Go to step 3.
3	CHECK ECM.	Is ECM normal?	Go to step 4.	Replace the ECM.
4	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 5.
5	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AR:DTC C0071 EXCESSIVE STEERING ANGLE SENSOR OUTPUT OFFSET

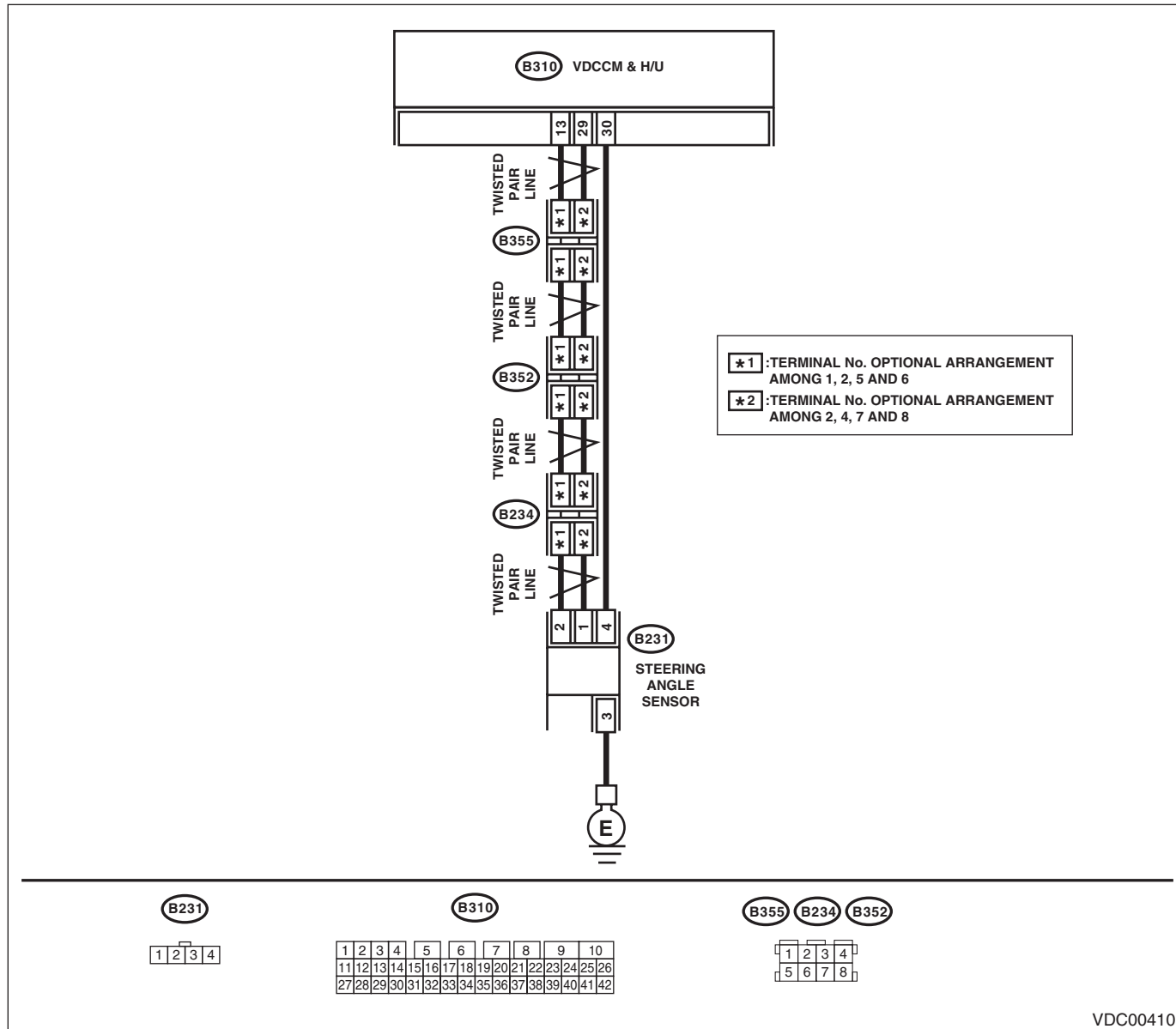
DTC DETECTING CONDITION:

Defective steering angle sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00410

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK STEERING WHEEL. 1) Drive the vehicle on a flat road. 2) Park the vehicle straight. 3) Check the steering wheel for deviation from center.	Is the deviation from the center of steering wheel less than 5°?	Go to step 2.	Perform the centering adjustment of steering wheel.
2 CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 3.
3 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AS:DTC C0071 EXCESSIVE VARIATION AMOUNT OF STEERING ANGLE SENSOR OUTPUT

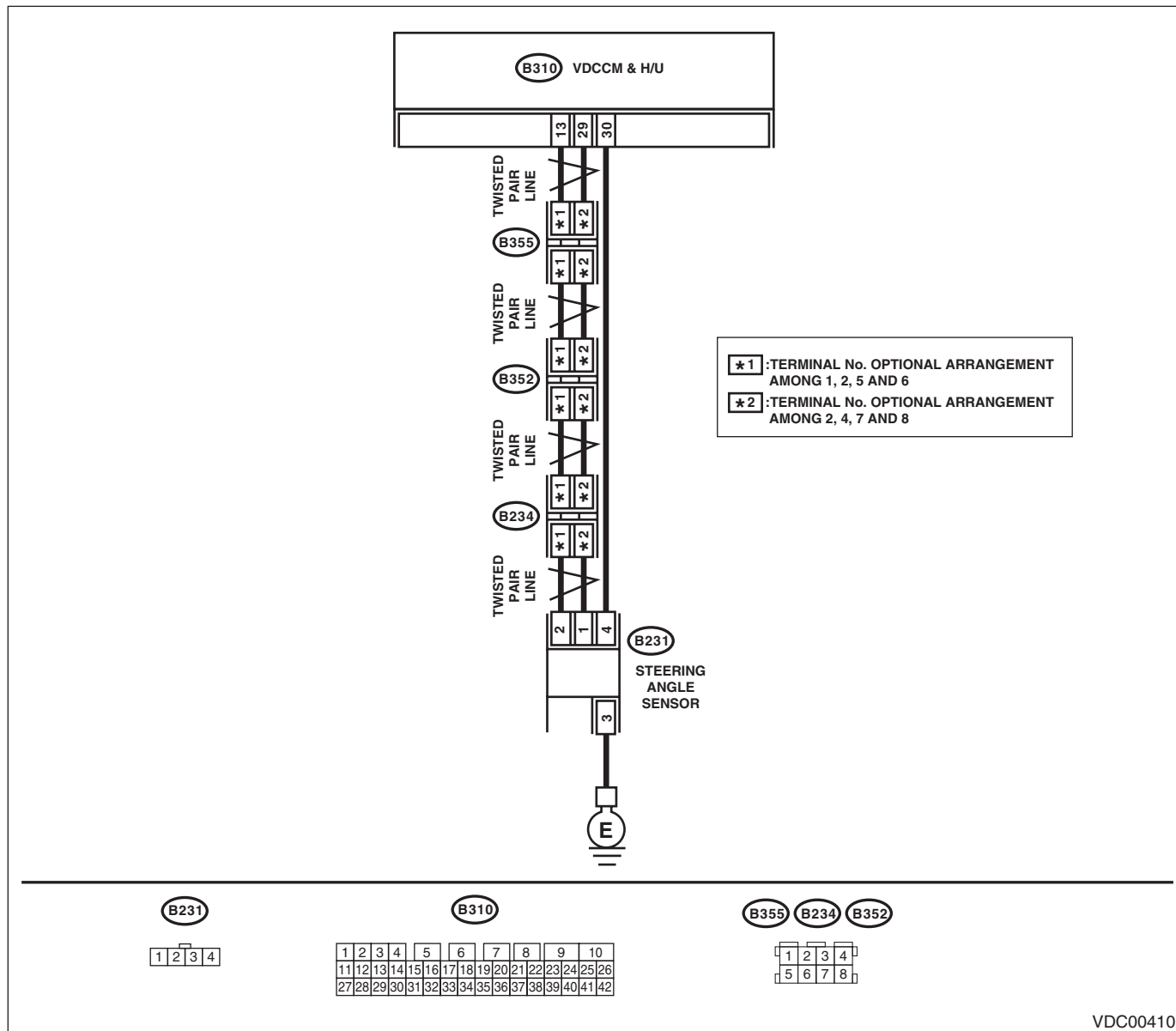
DTC DETECTING CONDITION:

Defective steering angle sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00410

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

	Step	Check	Yes	No
1	CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 2.
2	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AT:DTC C0071 STEERING ANGLE SENSOR OUTPUT

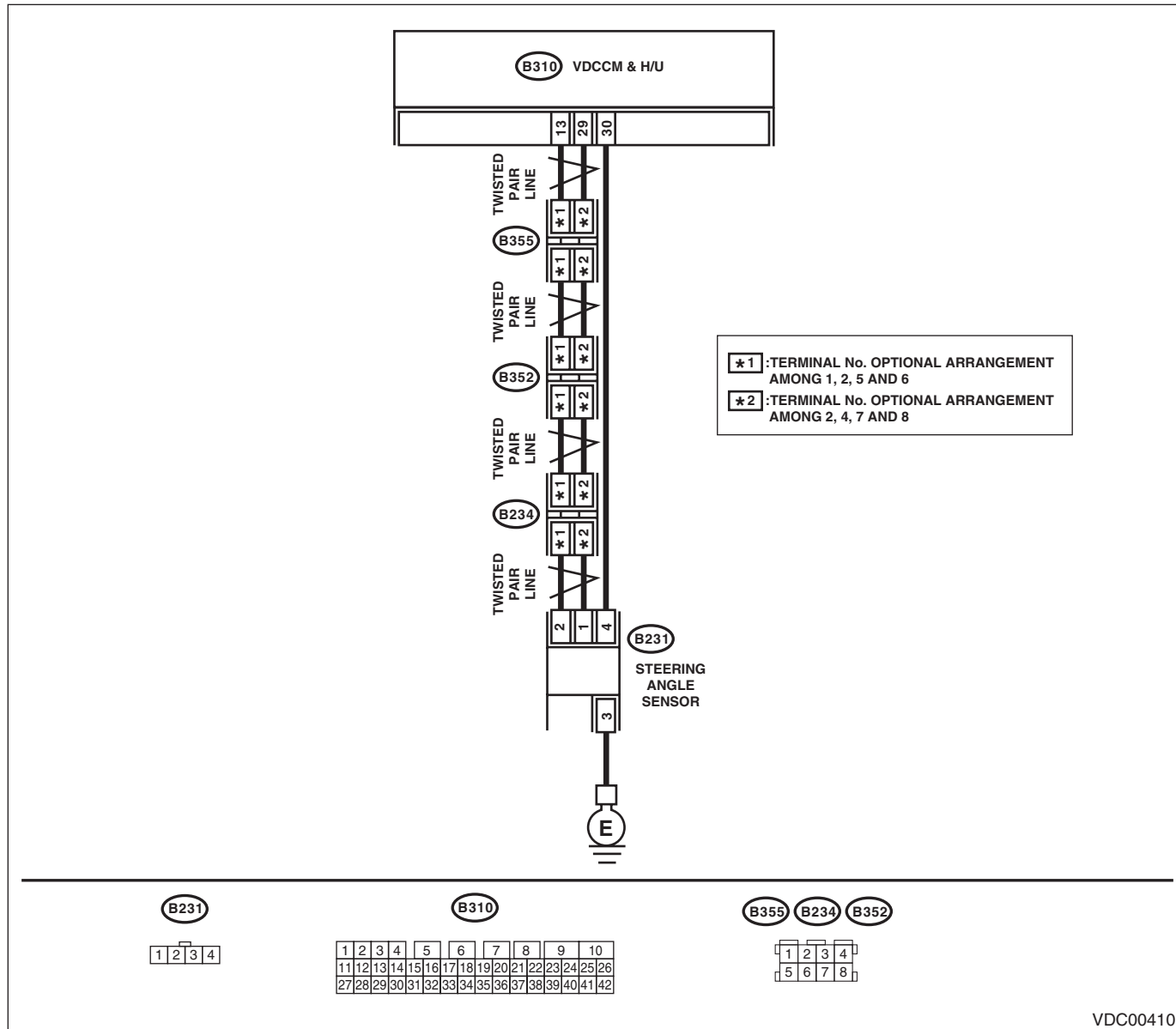
DTC DETECTING CONDITION:

Defective steering angle sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00410

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK STEERING WHEEL. 1) Drive the vehicle on a flat road. 2) Park the vehicle straight. 3) Check the steering wheel for deviation from center.	Is the deviation from the center of steering wheel less than 5°?	Go to step 2.	Perform the centering adjustment of steering wheel.
2 CHECK DRIVING PLACE. Check if the vehicle ran the road with banks or sandy surface (which does not mean a dirt road).	Did the vehicle run the road with banks or sandy surface (which does not mean a dirt road)?	VDCCM&H/U may record DTC when the vehicle ran the road with banks or sandy surface (which does not mean a dirt road).	Go to step 3.
3 CHECK OUTPUT OF STEERING ANGLE SENSOR WITH SUBARU SELECT MONITOR. 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Read the steering angle sensor output displayed on display.	Does the steering angle sensor output value on the display vary in accordance with steering operation when turning the steering wheel to the right or left?	Go to step 4.	Replace the steering angle sensor.
4 CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 5.
5 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AU:DTC C0071 STEERING ANGLE SENSOR COMMUNICATION

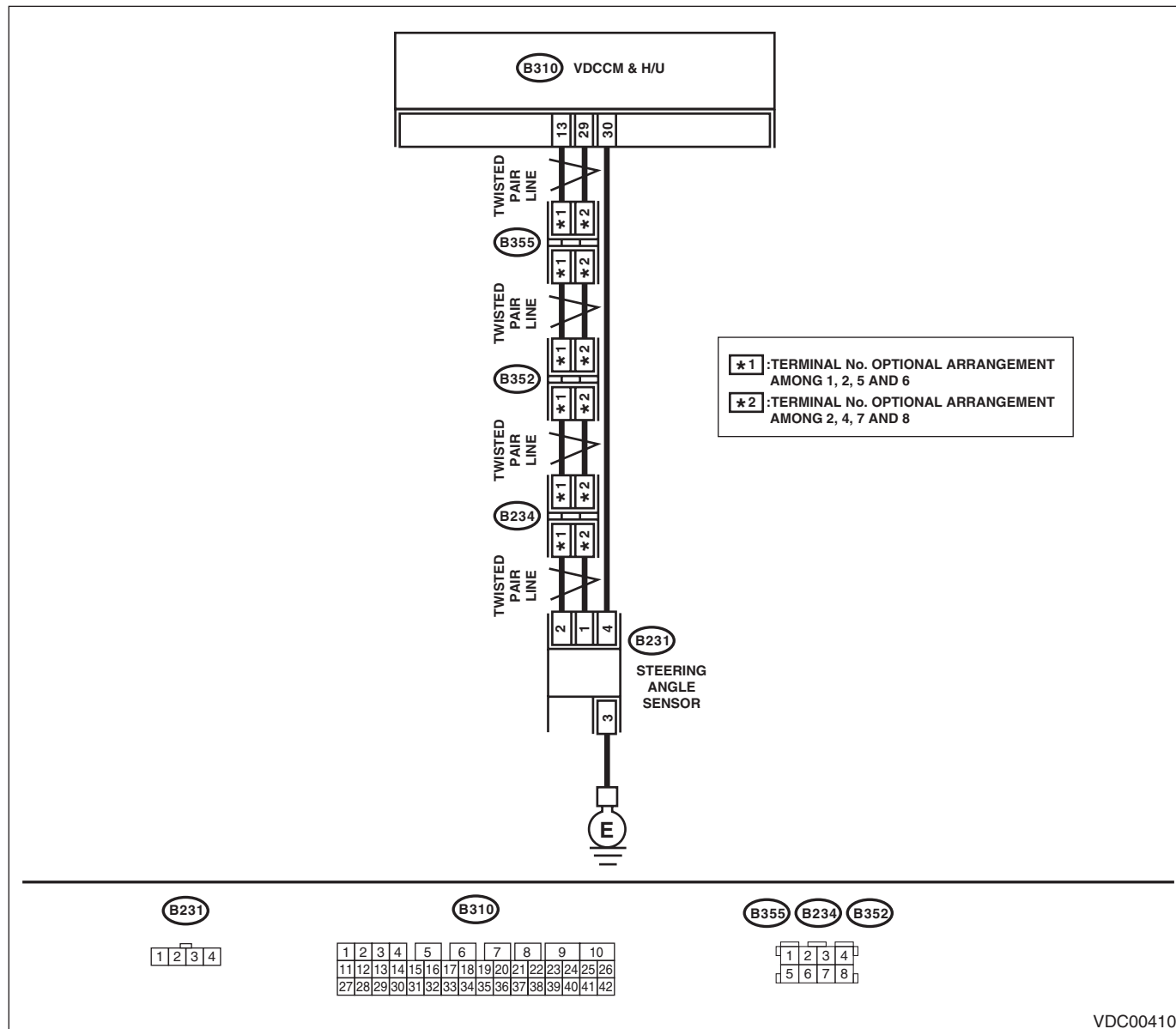
DTC DETECTING CONDITION:

Signal does not come from steering angle sensor.

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00410

Step	Check	Yes	No
<p>1</p> <p>CHECK POWER SUPPLY FOR STEERING ANGLE SENSOR.</p> <p>1) Turn the ignition switch to OFF.</p> <p>2) Disconnect the connector from steering angle sensor.</p> <p>3) Turn the ignition switch to ON.</p> <p>4) Measure the voltage between the steering angle sensor and chassis ground.</p> <p>Connector & terminal (B231) No. 4 (+) — Chassis ground (-):</p>	Is the voltage 10 — 15 V?	Go to step 4.	Go to step 2.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
2 CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 30 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Repair the harness between the steering angle sensor and VDCCM&H/U.	Go to step 3.
3 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 9.
4 CHECK GROUND CIRCUIT OF STEERING ANGLE SENSOR. Measure the resistance between steering angle sensor and chassis ground. <i>Connector & terminal</i> <i>(B231) No. 3 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 5.	Repair ground circuit in the steering angle sensor.
5 CHECK STEERING ANGLE SENSOR HARNESS. 1) Disconnect the connector from the VDCCM&H/U. 2) Measure the resistance between VDCCM&H/U and steering angle sensor. <i>Connector & terminal</i> <i>(B231) No. 1 — (B310) No. 29:</i> <i>(B231) No. 2 — (B310) No. 13:</i>	Is the resistance less than 0.5 Ω ?	Go to step 6.	Repair the harness between the steering angle sensor and VDCCM&H/U.
6 CHECK GROUND SHORT CIRCUIT OF STEERING ANGLE SENSOR HARNESS. Measure the resistance between steering angle sensor and chassis ground. <i>Connector & terminal</i> <i>(B231) No. 1 — Chassis ground:</i> <i>(B231) No. 2 — Chassis ground:</i>	Is the resistance more than 1 M Ω ?	Go to step 7.	Repair the harness between the steering angle sensor and VDCCM&H/U.
7 CHECK STEERING ANGLE SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Go to step 8.	Go to step 10.
8 CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Replace the steering angle sensor. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 11.
9 CHECK STEERING ANGLE SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 10.
10 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.
11 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Original steering angle sensor malfunction

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AV:DTC C0071 STEERING ANGLE SENSOR POWER SUPPLY MALFUNCTION

DTC DETECTING CONDITION:

Defective steering angle sensor

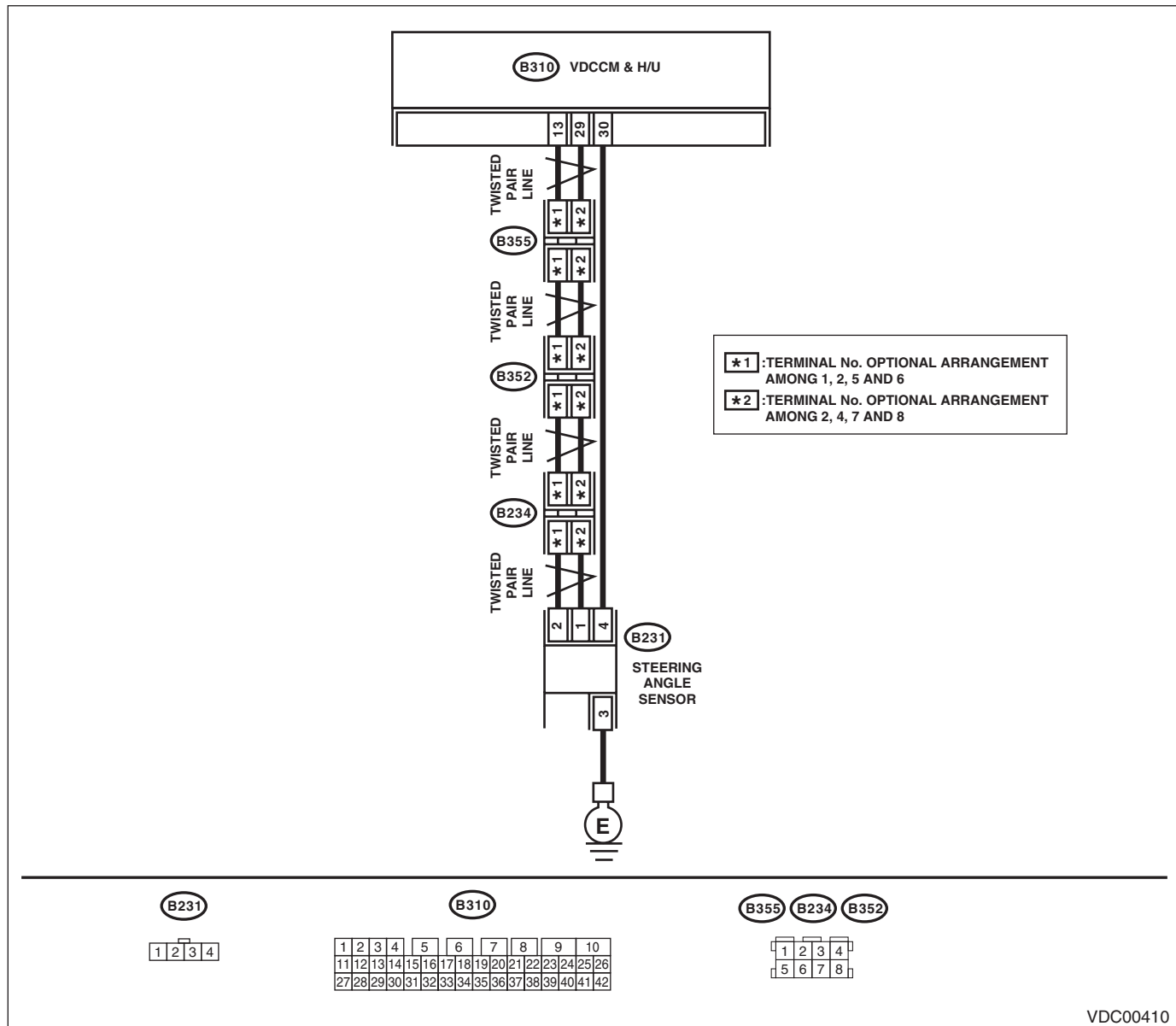
TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

NOTE:

- Warning light does not illuminate though problem is detected.
- The ABS and VDC operate normally if voltage returns.

WIRING DIAGRAM:



VDC00410

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POWER SUPPLY FOR STEERING ANGLE SENSOR. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from steering angle sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between the steering angle sensor and chassis ground. <i>Connector & terminal</i> <i>(B231) No. 4 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Go to step 4.	Go to step 2.
2 CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 30 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Repair the harness between the steering angle sensor and VDCCM&H/U.	Go to step 3.
3 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 7.
4 CHECK GROUND CIRCUIT OF STEERING ANGLE SENSOR. Measure the resistance between steering angle sensor and chassis ground. <i>Connector & terminal</i> <i>(B231) No. 3 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 5.	Repair ground circuit in the steering angle sensor.
5 CHECK STEERING ANGLE SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Go to step 6.	Go to step 8.
6 CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Replace the steering angle sensor. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 9.
7 CHECK STEERING ANGLE SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 8.
8 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.
9 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Original steering angle sensor malfunction

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AW:DTC C0072 YAW RATE SENSOR OUTPUT

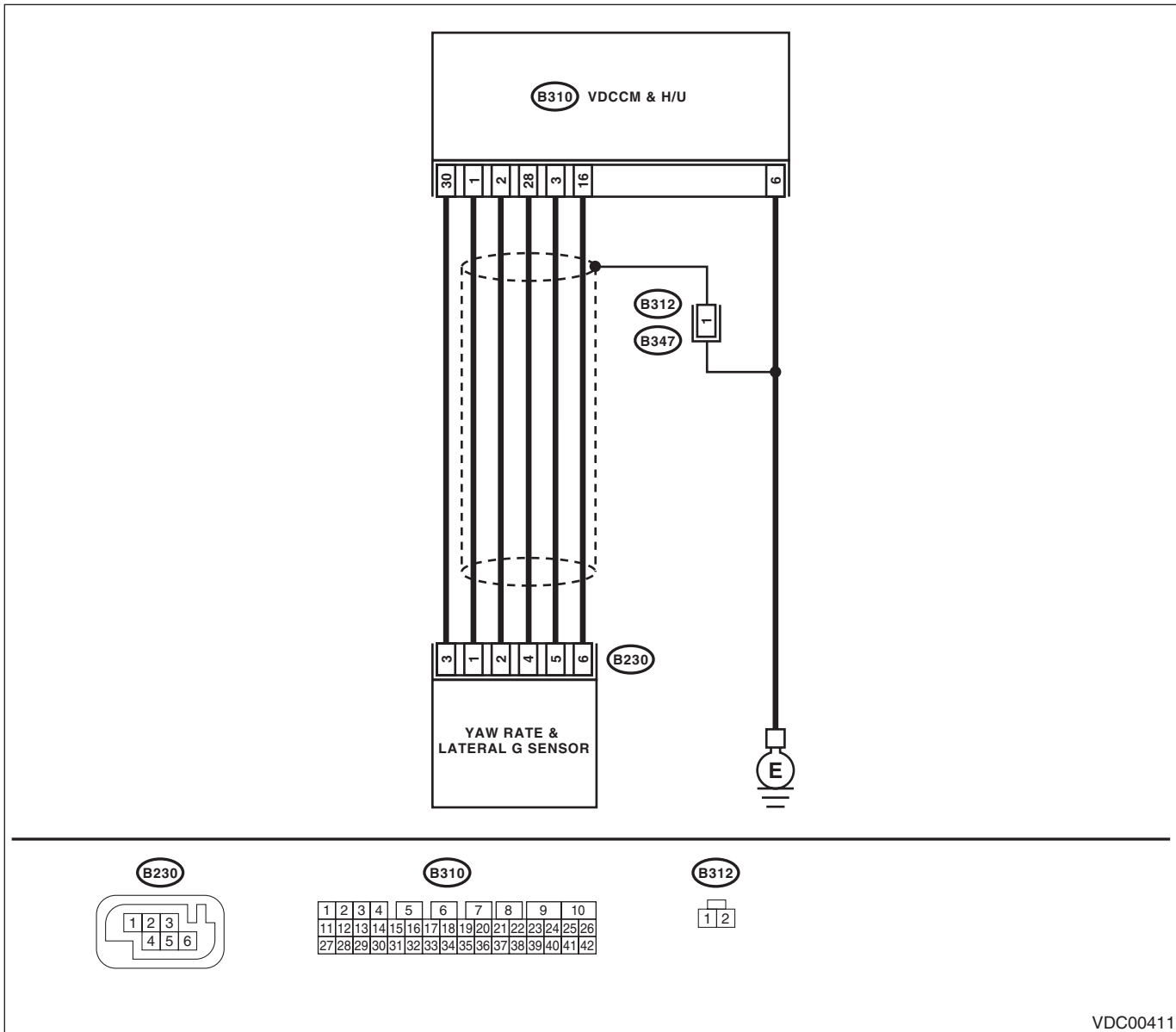
DTC DETECTING CONDITION:

Defective yaw rate sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00411

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

	Step	Check	Yes	No
1	CHECK DRIVING PLACE. Check if the vehicle ran the road with banks or sandy surface (which does not mean a dirt road).	Did the vehicle run the road with banks or sandy surface (which does not mean a dirt road)?	VDCCM&H/U may record DTC when the vehicle ran the road with banks or sandy surface (which does not mean a dirt road).	Go to step 2.
2	CHECK YAW RATE & LATERAL G SENSOR INSTALLATION.	Is the yaw rate & lateral G sensor installation bolt tightened to 7.5 N·m (0.76 kgf·m, 5.5 ft·lb)?	Go to step 3.	Tighten the yaw rate & lateral G sensor installation bolt.
3	CHECK OUTPUT OF YAW RATE & LATERAL G SENSOR WITH SUBARU SELECT MONITOR. 1) Drive the vehicle on a flat road. 2) Park the vehicle straight. 3) Select {Current Data Display & Save} in Subaru Select Monitor. 4) Read the yaw rate output displayed on display.	Is the reading indicated on monitor display -4 — 4 deg/s?	Go to step 4.	Replace the yaw rate & lateral G sensor.
4	CHECK OUTPUT OF STEERING ANGLE SENSOR WITH SUBARU SELECT MONITOR. 1) Drive the vehicle on a flat road. 2) Park the vehicle straight. 3) Select {Current Data Display & Save} in Subaru Select Monitor. 4) Read the steering angle sensor output displayed on display.	Is the reading indicated on monitor display -5 — 5°?	Go to step 5.	Perform the centering adjustment of steering wheel.
5	CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Go to step 6.	Go to step 7.
6	CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Replace the yaw rate & lateral G sensor. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 8.
7	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.
8	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Malfunction is found in original yaw rate & lateral G sensor.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AX:DTC C0072 YAW RATE SENSOR POWER/OUTPUT

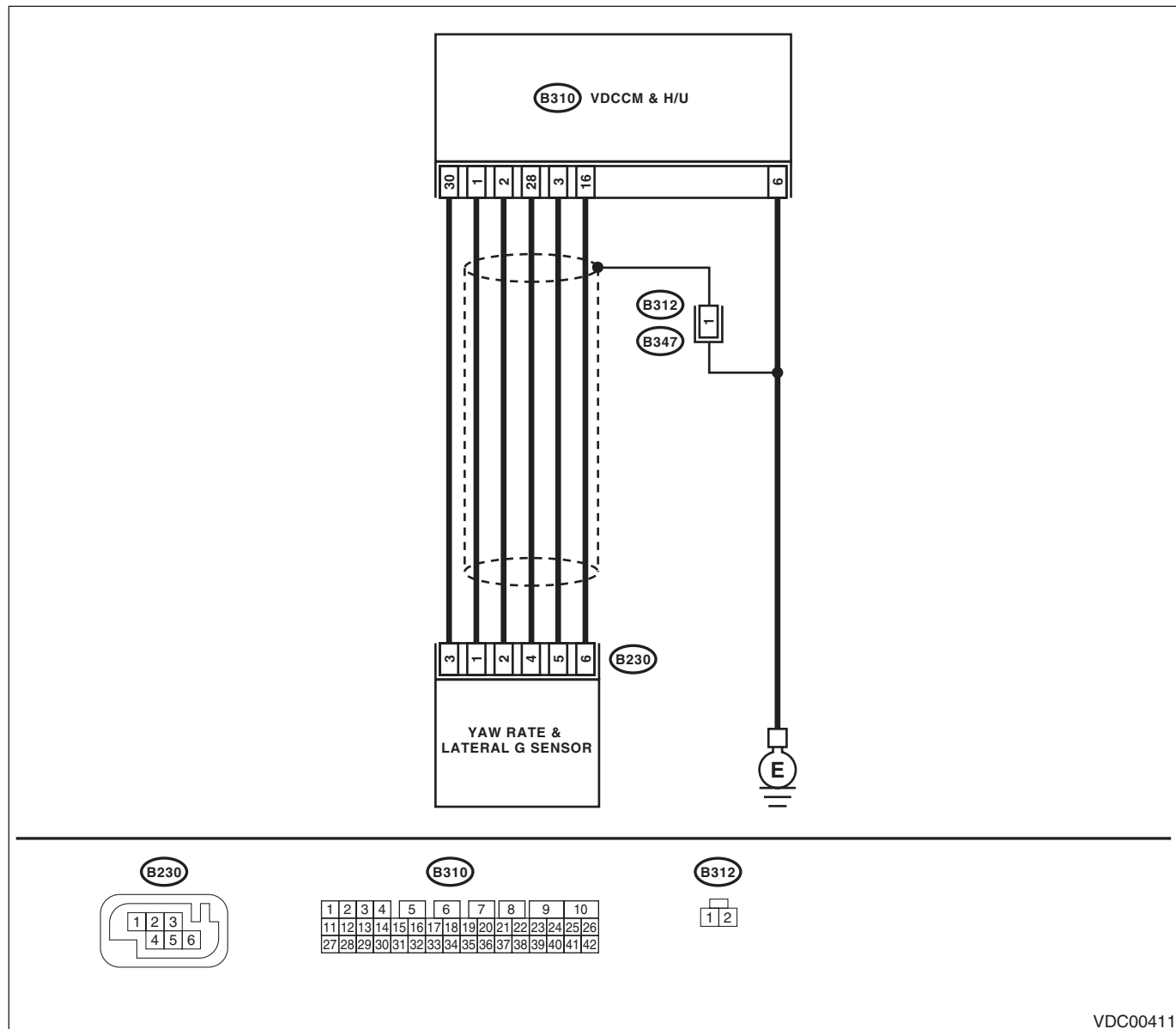
DTC DETECTING CONDITION:

Defective yaw rate sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00411

Step	Check	Yes	No
1 CHECK YAW RATE & LATERAL G SENSOR POWER SUPPLY. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from yaw rate & lateral G sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between yaw rate & lateral G sensor and chassis ground. Connector & terminal (B230) No. 3 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 4.	Go to step 2.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
2 CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 30 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 3.
3 CHECK POOR CONTACT OF CONNECTOR.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 10.
4 CHECK YAW RATE & LATERAL G SENSOR GROUND CIRCUIT. Measure the resistance between the yaw rate & lateral G sensor and chassis ground. <i>Connector & terminal</i> <i>(B230) No. 6 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 7.	Go to step 5.
5 CHECK THE VDCCM&H/U GROUND CIRCUIT. Measure the resistance between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 16 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 6.
6 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 10.
7 CHECK YAW RATE & LATERAL G SENSOR HARNESS. 1) Disconnect the connector from the VDCCM&H/U. 2) Measure the resistance between VDCCM& H/U and yaw rate & lateral G sensor. <i>Connector & terminal</i> <i>(B310) No. 28 — (B230) No. 4:</i>	Is the resistance less than 0.5 Ω ?	Go to step 8.	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.
8 CHECK GROUND SHORT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 28 — Chassis ground:</i>	Is the resistance more than 1 M Ω ?	Go to step 9.	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.
9 CHECK YAW RATE & LATERAL G SENSOR. 1) Connect all the connectors. 2) Turn the ignition switch to ON. 3) Check the signal pattern of oscilloscope between VDCCM&H/U connector terminals. <Ref. to VDC(diag)-16, WAVEFORM, MEASUREMENT, Control Module I/O Signal.> <i>Connector & terminal</i> <i>(B310) No. 2 — No. 16:</i> <i>(B310) No. 28 — No. 16:</i>	Is the oscilloscope pattern the same waveform as shown in the figure?	Go to step 10.	Replace the yaw rate & lateral G sensor.
10 CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 11.
11 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AY:DTC C0072 YAW RATE SENSOR REFERENCE

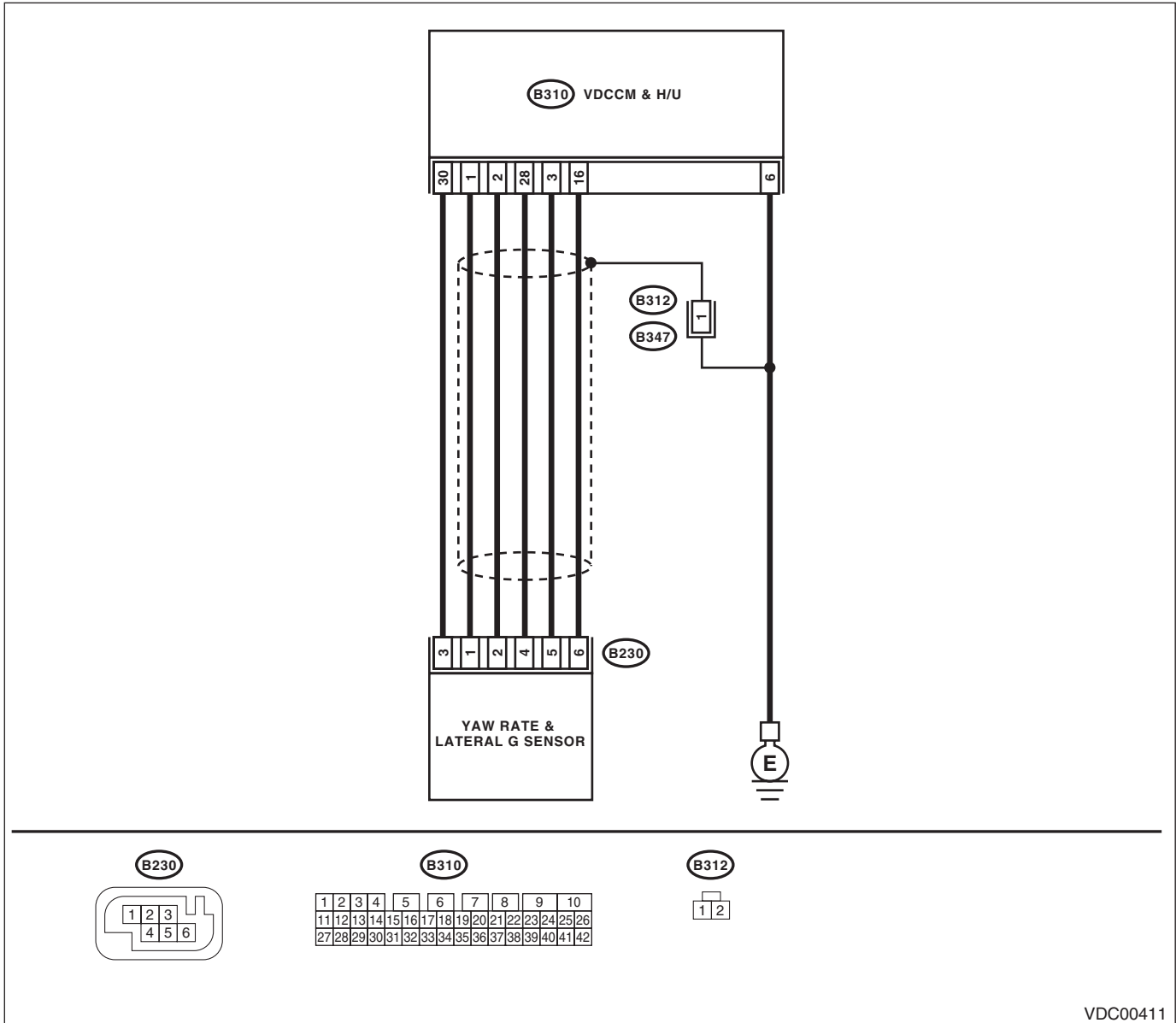
DTC DETECTING CONDITION:

Defective yaw rate sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



Step	Check	Yes	No
1 CHECK POWER SUPPLY FOR YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from yaw rate & lateral G sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between yaw rate & lateral G sensor and chassis ground. Connector & terminal (B230) No. 3 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 3.	Go to step 2.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
2 CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 30 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 5.
3 CHECK YAW RATE & LATERAL G SENSOR GROUND CIRCUIT. Measure the resistance between the yaw rate & lateral G sensor and chassis ground. <i>Connector & terminal</i> <i>(B230) No. 6 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 6.	Go to step 4.
4 CHECK THE VDCCM&H/U GROUND CIRCUIT. Measure the resistance between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 16 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 5.
5 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 9.
6 CHECK HARNESS OF YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Measure the resistance between VDCCM&H/U and yaw rate & lateral G sensor. <i>Connector & terminal</i> <i>(B310) No. 1 — (B230) No. 1:</i>	Is the resistance less than 0.5 Ω ?	Go to step 7.	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.
7 CHECK GROUND SHORT CIRCUIT OF HARNESS. Measure the resistance between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 1 — Chassis ground:</i>	Is the resistance more than 1 M Ω ?	Go to step 8.	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.
8 CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Install the yaw rate & lateral G sensor to the body. 3) Connect all the connectors. 4) Turn the ignition switch to ON. 5) Measure the voltage between VDCCM&H/U connector terminals. <i>Connector & terminal</i> <i>(B310) No. 1 (+) — (B310) No. 16 (-):</i>	Is the voltage 2.1 — 2.9 V?	Go to step 9.	Replace the yaw rate & lateral G sensor. <Ref. to VDC-14, Yaw Rate and Lateral G Sensor.>
9 CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 10.
10 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

AZ:DTC C0072 EXCESSIVE VARIATION AMOUNT OF YAW RATE SENSOR OUTPUT

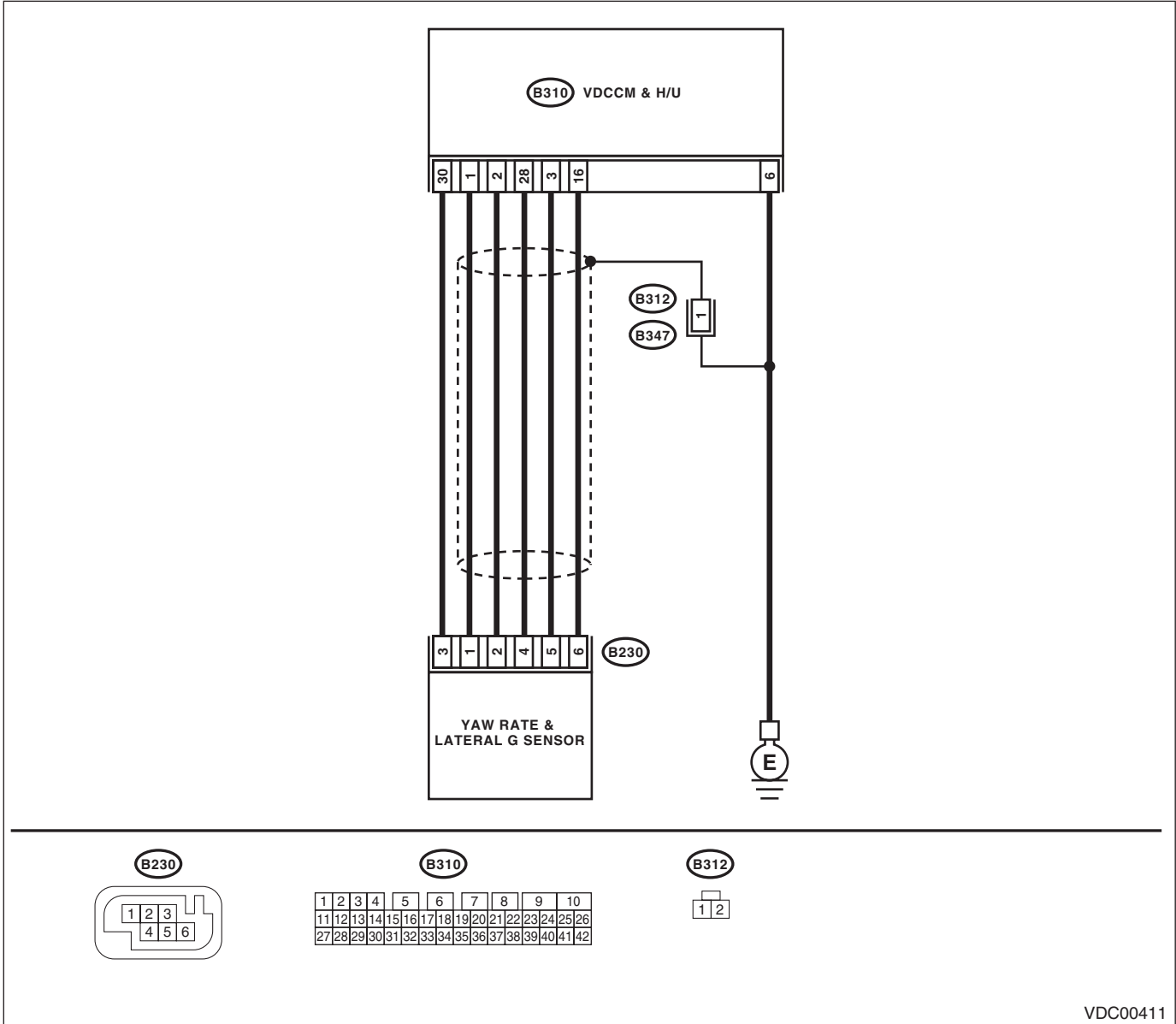
DTC DETECTING CONDITION:

Defective yaw rate sensor

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00411

Step	Check	Yes	No
1	<p>CHECK DRIVING PLACE. Check if the vehicle ran the road with banks or sandy surface (which does not mean a dirt road).</p>	<p>VDCCM&H/U may record DTC when the vehicle ran the road with banks or sandy surface (which does not mean a dirt road).</p>	<p>Go to step 2.</p>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
2	CHECK YAW RATE & LATERAL G SENSOR INSTALLATION.	Go to step 3.	Tighten the yaw rate & lateral G sensor installation bolt.
3	CHECK YAW RATE & LATERAL G SENSOR POWER SUPPLY. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from yaw rate & lateral G sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between yaw rate & lateral G sensor and chassis ground. Connector & terminal (B230) No. 3 (+) — Chassis ground (-):	Go to step 5.	Go to step 4.
4	CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. Connector & terminal (B310) No. 30 (+) — Chassis ground (-):	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 7.
5	CHECK YAW RATE & LATERAL G SENSOR GROUND CIRCUIT. Measure the resistance between the yaw rate & lateral G sensor and chassis ground. Connector & terminal (B230) No. 6 — Chassis ground:	Go to step 8.	Go to step 6.
6	CHECK THE VDCCM&H/U GROUND CIRCUIT. Measure the resistance between VDCCM&H/U and chassis ground. Connector & terminal (B310) No. 16 — Chassis ground:	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 7.
7	CHECK POOR CONTACT IN CONNECTORS.	Correct or replace the connector.	Go to step 14.
8	CHECK HARNESS OF YAW RATE & LATERAL G SENSOR. 1) Disconnect the connector from the VDCCM&H/U. 2) Measure the resistance between VDCCM& H/U and yaw rate & lateral G sensor. Connector & terminal (B310) No. 1 — (B230) No. 1: (B310) No. 2 — (B230) No. 2: (B310) No. 28 — (B230) No. 4:	Go to step 9.	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.
9	CHECK GROUND SHORT CIRCUIT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 1 — Chassis ground: (B310) No. 2 — Chassis ground: (B310) No. 28 — Chassis ground:	Go to step 10.	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.
10	CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Turn the ignition switch to ON. 4) Measure the voltage between VDCCM&H/U connector terminals. Connector & terminal (B310) No. 1 (+) — (B310) No. 16 (-):	Go to step 11.	Replace the yaw rate & lateral G sensor.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
11 CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to ON. 2) Check the signal pattern of oscilloscope between VDCCM&H/U connector terminals. <Ref. to VDC(diag)-16, WAVEFORM, MEASUREMENT, Control Module I/O Signal.> Connector & terminal (B310) No. 2 — No. 16: (B310) No. 28 — No. 16:	Is the oscilloscope pattern the same waveform as shown in the figure?	Go to step 12.	Replace the yaw rate & lateral G sensor.
12 CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Go to step 13.	Go to step 15.
13 CHECK THE VDCCM&H/U. 1) Turn the ignition switch to OFF. 2) Replace the yaw rate & lateral G sensor. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 16.
14 CHECK YAW RATE & LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 15.
15 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.
16 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Malfunction is found in original yaw rate & lateral G sensor.

BA:DTC C0073 EXCESSIVE AMOUNT OF LATERAL G SENSOR OUTPUT OFF-SET

NOTE:

Refer to DTC C0073 for diagnostic procedure. <Ref. to VDC(diag)-102, DTC C0073 EXCESSIVE LATERAL G SENSOR OUTPUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

BB:DTC C0073 LATERAL G SENSOR OUTPUT

NOTE:

Refer to DTC C0073 for diagnostic procedure. <Ref. to VDC(diag)-102, DTC C0073 EXCESSIVE LATERAL G SENSOR OUTPUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

BC:DTC C0073 EXCESSIVE VARIATION AMOUNT OF LATERAL G SENSOR OUTPUT

NOTE:

Refer to DTC C0073 for diagnostic procedure. <Ref. to VDC(diag)-102, DTC C0073 EXCESSIVE LATERAL G SENSOR OUTPUT, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

BD:DTC C0073 EXCESSIVE LATERAL G SENSOR OUTPUT

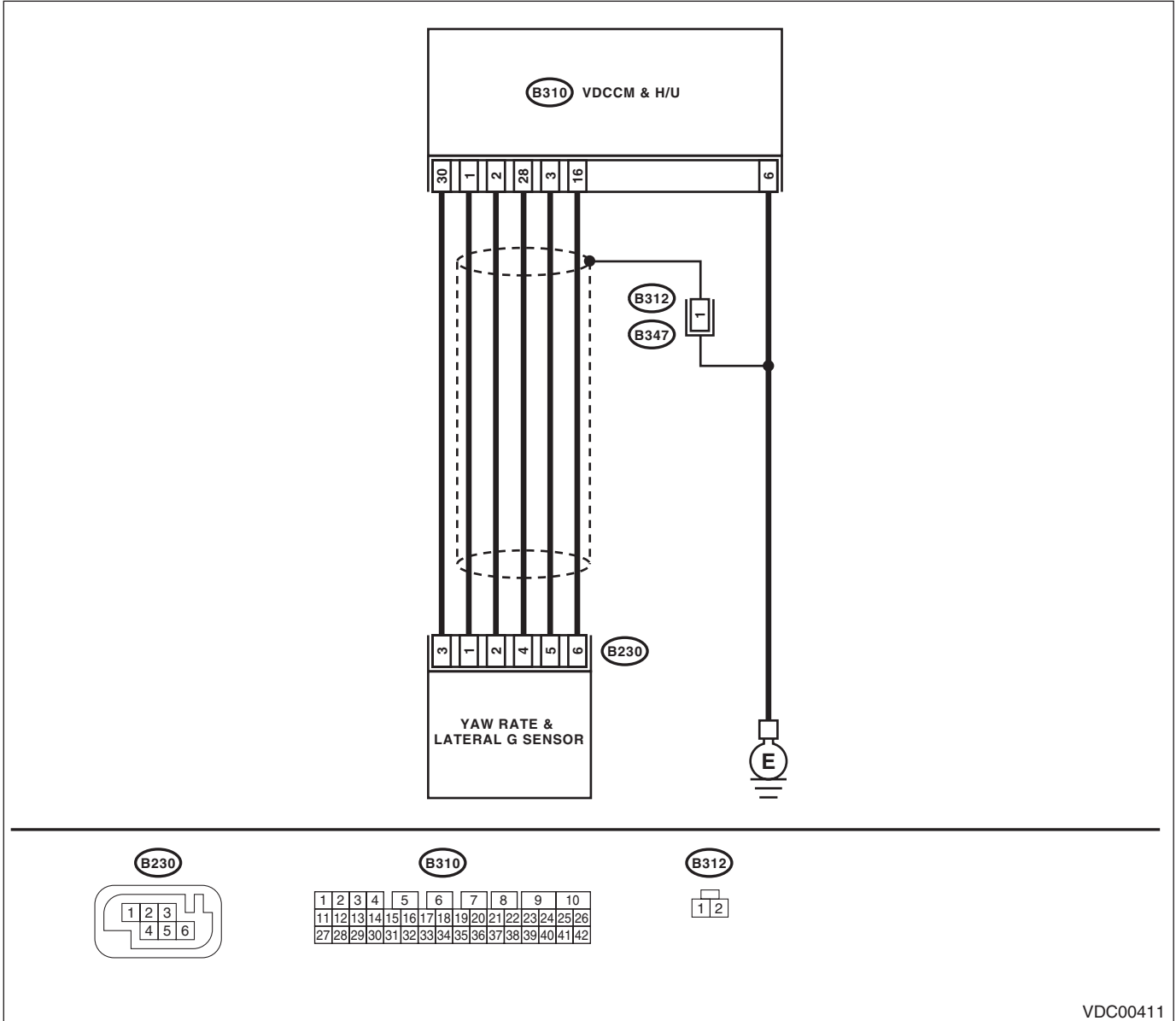
DTC DETECTING CONDITION:

Lateral G sensor malfunction

TROUBLE SYMPTOM:

VDC does not operate.

WIRING DIAGRAM:



VDC00411

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No	
1	CHECK YAW RATE & LATERAL G SENSOR INSTALLATION.	Is the yaw rate & lateral G sensor installation bolt tightened to 7.5 N-m (0.76 kgf-m, 5.5 ft-lb)?	Go to step 2.	Tighten the yaw rate & lateral G sensor installation bolt.
2	CHECK LATERAL G SENSOR OUTPUT. 1) Park the vehicle on a level surface. 2) Select {Current Data Display & Save} in Subaru Select Monitor. 3) Read the lateral G sensor output displayed on screen.	Is the indicated reading on the monitor display $-1.5 - 1.5 \text{ m/s}^2$?	Go to step 3.	Replace the yaw rate & lateral G sensor.
3	CHECK LATERAL G SENSOR OUTPUT. 1) Turn the ignition switch to OFF. 2) Remove the yaw rate & lateral G sensor from vehicle. 3) Turn the ignition switch to ON, and select {Current Data Display & Save} in Subaru Select Monitor. 4) Read the lateral G sensor output displayed on screen.	When the yaw rate & lateral G sensor is inclined 90° to the right, is the indicated value $6.8 - 12.8 \text{ m/s}^2$?	Go to step 4.	Replace the yaw rate & lateral G sensor.
4	CHECK LATERAL G SENSOR. Read the lateral G sensor output displayed on screen.	When the yaw rate & lateral G sensor is inclined 90° to the left, is the indicated value $-6.8 - -12.8 \text{ m/s}^2$?	Go to step 5.	Replace the yaw rate & lateral G sensor.
5	CHECK POOR CONTACT IN CONNECTORS. Turn the ignition switch to OFF.	Is there poor contact in connector between VDCCM& H/U and yaw rate & lateral G sensor?	Repair the connector.	Go to step 6.
6	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 7.
7	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

BE:DTC C0073 LATERAL G SENSOR POWER/OUTPUT

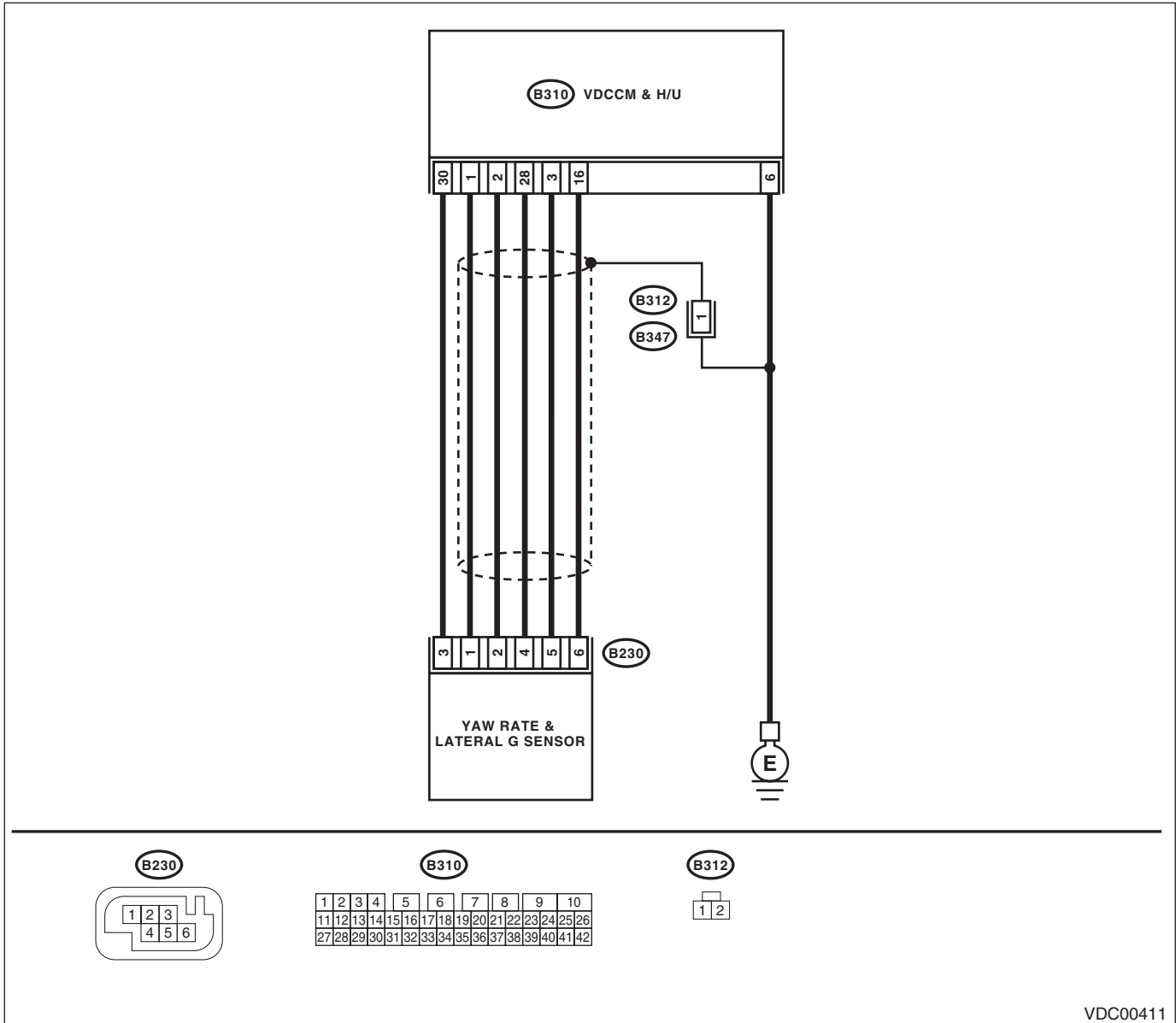
DTC DETECTING CONDITION:

Lateral G sensor malfunction

DTC DETECTING CONDITION:

VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No	
1	CHECK LATERAL G SENSOR OUTPUT. 1) Park the vehicle on a level surface. 2) Select {Current Data Display & Save} in Subaru Select Monitor. 3) Read the lateral G sensor output displayed on screen.	Is the indicated reading on the monitor display $-1.5 \text{ — } 1.5 \text{ m/s}^2$?	Go to step 2.	Go to step 3.
2	CHECK POOR CONTACT IN CONNECTORS. Turn the ignition switch to OFF.	Is there poor contact in connector between VDCCM& H/U and yaw rate & lateral G sensor?	Repair the connector.	Go to step 10.
3	CHECK YAW RATE & LATERAL G SENSOR POWER SUPPLY. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from yaw rate & lateral G sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between yaw rate & lateral G sensor and chassis ground. Connector & terminal (B230) No. 3 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Go to step 6.	Go to step 4.
4	CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. Connector & terminal (B310) No. 30 (+) — Chassis ground (-):	Is the voltage 10 — 15 V?	Repair the harness between yaw rate & lateral G sensor and VDCCM& H/U.	Go to step 5.
5	CHECK POOR CONTACT OF CONNECTOR.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 10.
6	CHECK OPEN CIRCUIT IN LATERAL G SENSOR OUTPUT HARNESS. 1) Disconnect the connector from yaw rate & lateral G sensor. 2) Disconnect the connector from the VDCCM&H/U. 3) Measure the resistance between VDCCM& H/U and yaw rate & lateral G sensor. Connector & terminal (B310) No. 3 — (B230) No. 5:	Is the resistance less than 0.5Ω ?	Go to step 7.	Repair the harness connector between yaw rate & lateral G sensor and VDCCM&H/U.
7	CHECK GROUND SHORT CIRCUIT FOR YAW RATE & LATERAL G SENSOR HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 3 — Chassis ground:	Is the resistance more than $1 \text{ M}\Omega$?	Go to step 8.	Repair the harness connector between yaw rate & lateral G sensor and VDCCM&H/U.
8	CHECK LATERAL G SENSOR. 1) Turn the ignition switch to OFF. 2) Remove the yaw rate & lateral G sensor from vehicle. 3) Connect the connector to the yaw rate & lateral G sensor. 4) Connect the VDCCM&H/U connector. 5) Turn the ignition switch to ON. 6) Measure the voltage between yaw rate & lateral G sensor connector terminals. Connector & terminal (B230) No. 5 (+) — (B230) No. 6 (-):	Is the voltage 2.35 — 2.65 V when yaw rate & lateral G sensor is on a level?	Go to step 9.	Replace the yaw rate & lateral G sensor.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
9 CHECK POOR CONTACT IN CONNECTORS.	Is there poor contact in connector between VDCCM& H/U and yaw rate & lateral G sensor?	Repair the connector.	Go to step 10.
10 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 11.
11 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

BF:DTC C0074 PRESSURE SENSOR TEST MALFUNCTION

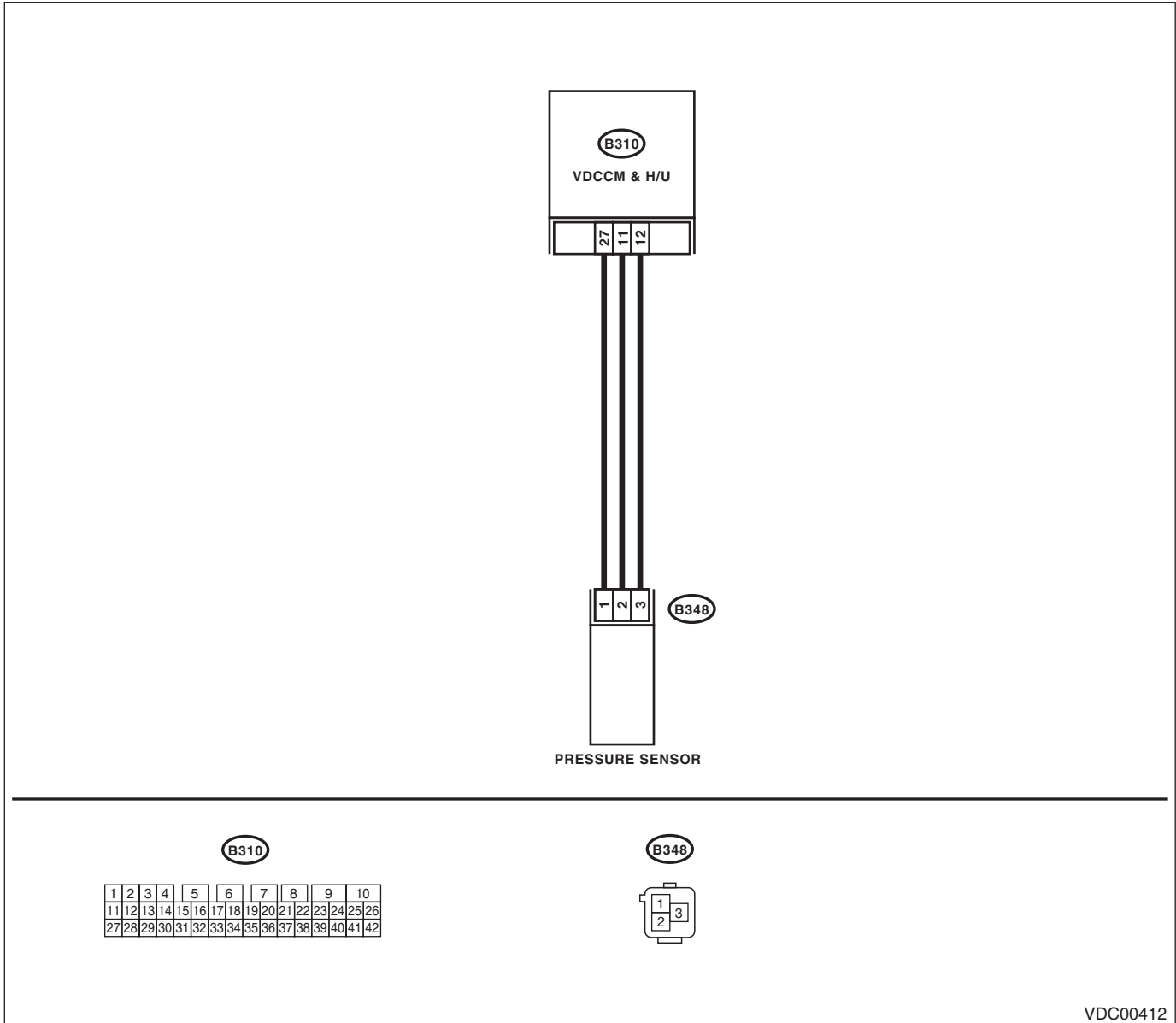
DTC DETECTING CONDITION:

Defective pressure sensor

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK PRESSURE SENSOR POWER SUPPLY. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the pressure sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between pressure sensor connector and chassis ground. <i>Connector & terminal</i> <i>(B348) No. 1 (+) — Chassis ground (-):</i>	Is the voltage 4.75 — 5.25 V?	Go to step 4.	Go to step 2.
2 CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 27 (+) — Chassis ground (-):</i>	Is the voltage 4.75 — 5.25 V?	Repair the harness between the pressure sensor and VDCCM&H/U.	Go to step 3.
3 CHECK POOR CONTACT OF CONNECTOR.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 9.
4 CHECK GROUND CIRCUIT OF PRESSURE SENSOR. Measure the resistance between pressure sensor and chassis ground. <i>Connector & terminal</i> <i>(B348) No. 3 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Go to step 7.	Go to step 5.
5 CHECK THE VDCCM&H/U GROUND CIRCUIT. Measure the resistance between VDCCM&H/U and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 12 — Chassis ground:</i>	Is the resistance less than 0.5 Ω ?	Repair the harness between the pressure sensor and VDCCM&H/U.	Go to step 6.
6 CHECK POOR CONTACT OF CONNECTOR.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 9.
7 CHECK PRESSURE SENSOR HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Measure the resistance between VDCCM&H/U and pressure sensor. <i>Connector & terminal</i> <i>(B310) No. 11 — (B348) No. 2:</i>	Is the resistance less than 0.5 Ω ?	Go to step 8.	Repair the harness between the pressure sensor and VDCCM&H/U.
8 CHECK GROUND SHORT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal</i> <i>(B310) No. 11 — Chassis ground:</i>	Is the resistance more than 1 M Ω ?	Go to step 9.	Repair the harness between the pressure sensor and VDCCM&H/U.
9 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 10.
10 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

BG:DTC C0074 EXCESSIVE PRESSURE SENSOR OUTPUT OFFSET

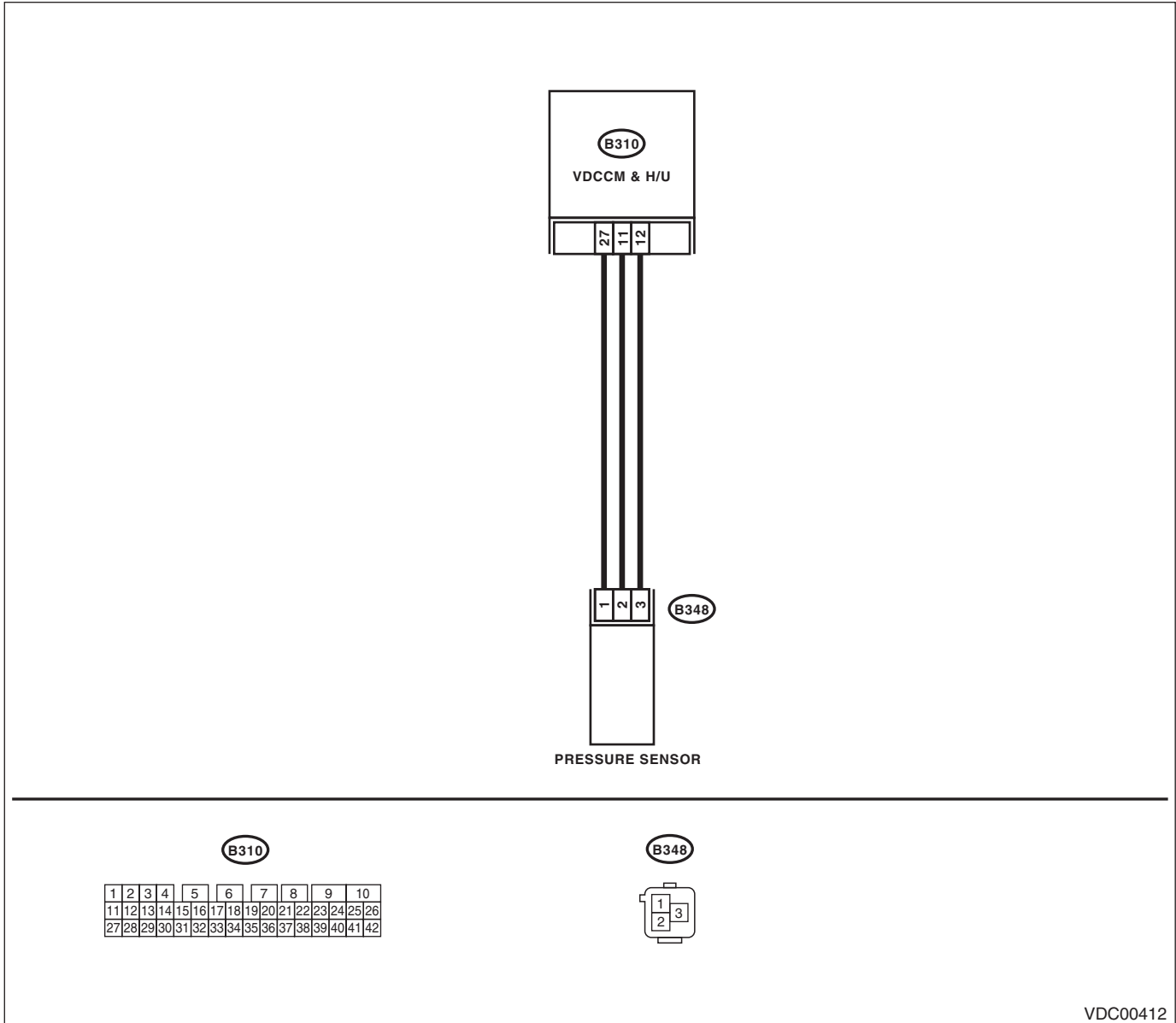
DTC DETECTING CONDITION:

Defective pressure sensor

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK STOP LIGHT SWITCH CIRCUIT. Check stop light switch open circuit.	Is the stop light switch circuit OK?	Go to step 2.	Repair the stop light switch circuit.
2 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 3.
3 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-36, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

BH:DTC C0074 PRESSURE SENSOR POWER/OUTPUT

DTC DETECTING CONDITION:

Defective pressure sensor

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

NOTE:

For the diagnostic procedure, refer to DTC C0074 "PRESSURE SENSOR TEST MALFUNCTION". <Ref. to VDC(diag)-107, DTC C0074 PRESSURE SENSOR TEST MALFUNCTION, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

BI: DTC C0074 PRESSURE SENSOR OUTPUT

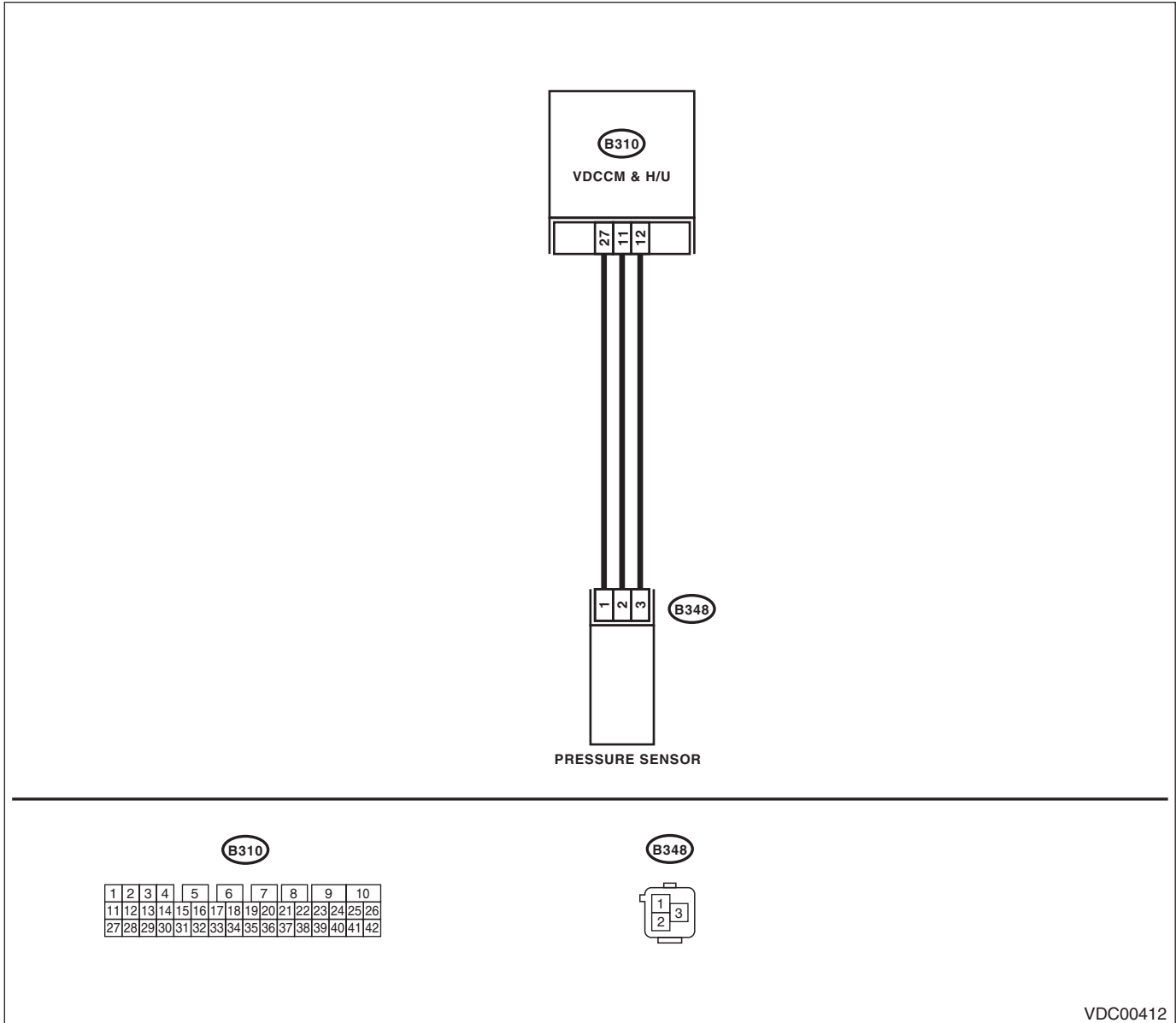
DTC DETECTING CONDITION:

Defective pressure sensor

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No	
1	CHECK STOP LIGHT SWITCH CIRCUIT. Check stop light switch open circuit.	Is the stop light switch circuit OK?	Go to step 2.	If there is malfunction in the stop light switch circuit, DTC may be recorded in the memory.
2	CHECK PRESSURE SENSOR POWER SUPPLY. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the pressure sensor. 3) Turn the ignition switch to ON. 4) Measure the voltage between pressure sensor connector and chassis ground. Connector & terminal (B348) No. 1 (+) — Chassis ground (-):	Is the voltage 4.75 — 5.25 V?	Go to step 5.	Go to step 3.
3	CHECK OUTPUT VOLTAGE OF VDCCM&H/U. Measure the voltage between VDCCM&H/U and chassis ground. Connector & terminal (B310) No. 27 (+) — Chassis ground (-):	Is the voltage 4.75 — 5.25 V?	Repair the harness between the pressure sensor and VDCCM&H/U.	Go to step 4.
4	CHECK POOR CONTACT OF CONNECTOR.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 10.
5	CHECK GROUND CIRCUIT OF PRESSURE SENSOR. Measure the resistance between pressure sensor and chassis ground. Connector & terminal (B348) No. 3 — Chassis ground:	Is the resistance less than 0.5 Ω ?	Go to step 8.	Go to step 6.
6	CHECK THE VDCCM&H/U GROUND CIRCUIT. Measure the resistance between VDCCM&H/U and chassis ground. Connector & terminal (B310) No. 12 — Chassis ground:	Is the resistance less than 0.5 Ω ?	Repair the harness between the pressure sensor and VDCCM&H/U.	Go to step 7.
7	CHECK POOR CONTACT OF CONNECTOR.	Is there poor contact in connector?	Correct or replace the connector.	Go to step 10.
8	CHECK PRESSURE SENSOR HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U. 3) Measure the resistance between VDCCM&H/U and pressure sensor. Connector & terminal (B310) No. 11 — (B348) No. 2:	Is the resistance less than 0.5 Ω ?	Go to step 9.	Repair the harness between the pressure sensor and VDCCM&H/U.
9	CHECK GROUND SHORT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. Connector & terminal (B310) No. 11 — Chassis ground:	Is the resistance more than 1 M Ω ?	Go to step 10.	Repair the harness between the pressure sensor and VDCCM&H/U.
10	CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 11.
11	CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Temporary poor contact occurs.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

BJ:DTC C0074 PRESSURE SENSOR POWER MALFUNCTION

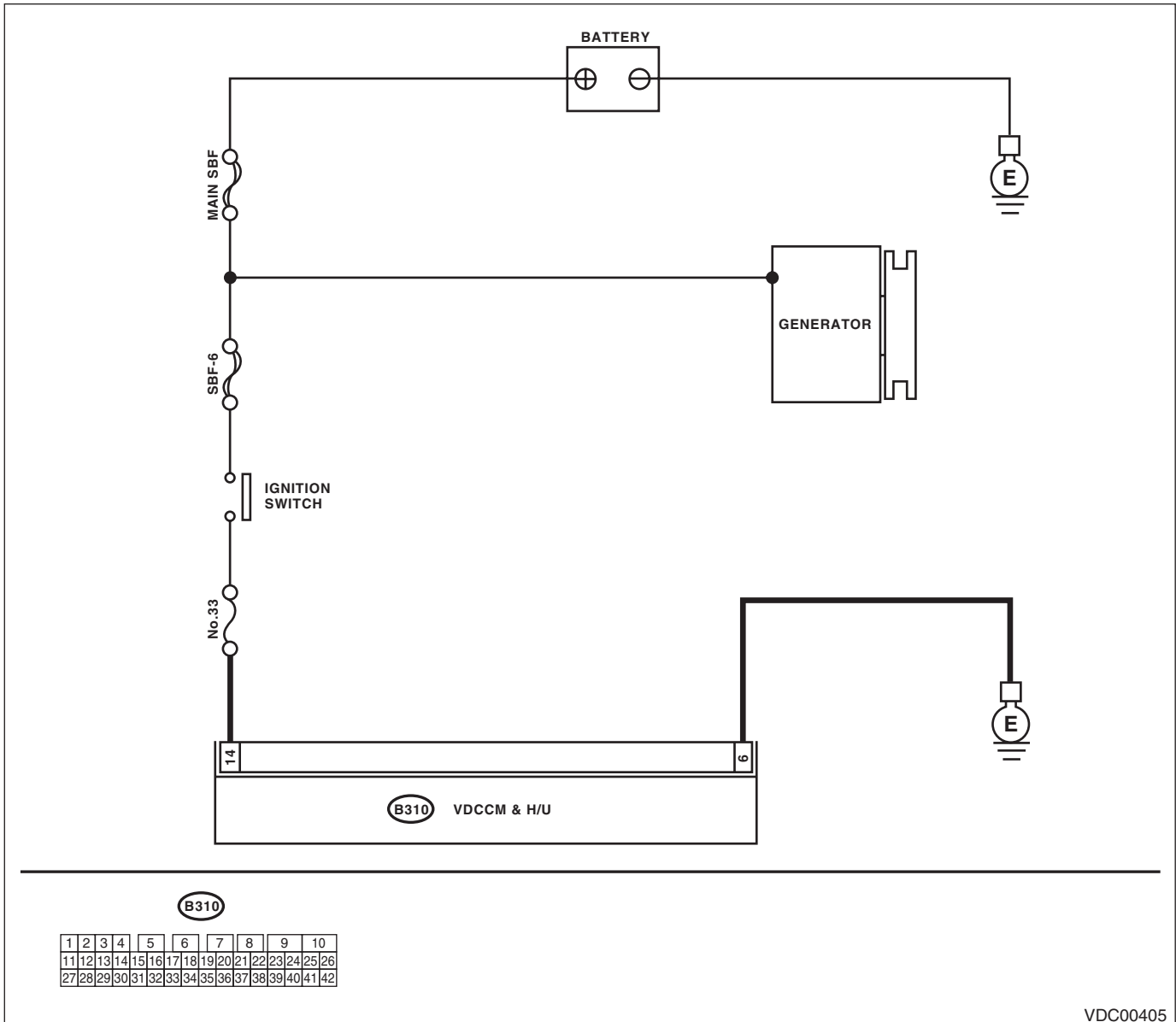
DTC DETECTING CONDITION:

Defective pressure sensor

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

WIRING DIAGRAM:



Diagnostic Procedure with Diagnostic Trouble Code (DTC)

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK POOR CONTACT IN CONNECTORS. Check if there is poor contact in VDCCM&H/U power supply circuit.	Is there poor contact?	Repair the connector.	Go to step 2.
2 CHECK THE VDCCM&H/U POWER SUPPLY CIRCUIT. 1) Turn the ignition switch to OFF. 2) Disconnect the VDCCM&H/U connector. 3) Turn the ignition switch to ON. 4) Measure the voltage between VDCCM&H/U connector terminals. Connector & terminal (B310) No. 14 (+) — (B310) No. 6 (-):	Is the voltage 10 — 15 V?	Go to step 3.	Check the power supply circuit in VDCCM&H/U.
3 CHECK THE VDCCM&H/U. 1) Connect all the connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U. <Ref. to VDC-7, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Go to step 4.
4 CHECK OTHER DTC DETECTION.	Is any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

BK:DTC C0081 SYSTEM MALFUNCTION

DTC DETECTING CONDITION:

VDC long time sequential control

TROUBLE SYMPTOM:

- ABS does not operate.
- VDC does not operate.

Step	Check	Yes	No
1 CHECK POOR CONTACT IN CONNECTOR.	Is there poor contact in the VDCCM& H/U and yaw rate & lateral G sensor connector?	Repair the connector.	Go to step 2.
2 CHECK THE VDCCM&H/U. 1) Replace the yaw rate & lateral G sensor. 2) Connect all the connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the VDCCM&H/U.	Malfunction is found in original yaw rate & lateral G sensor.