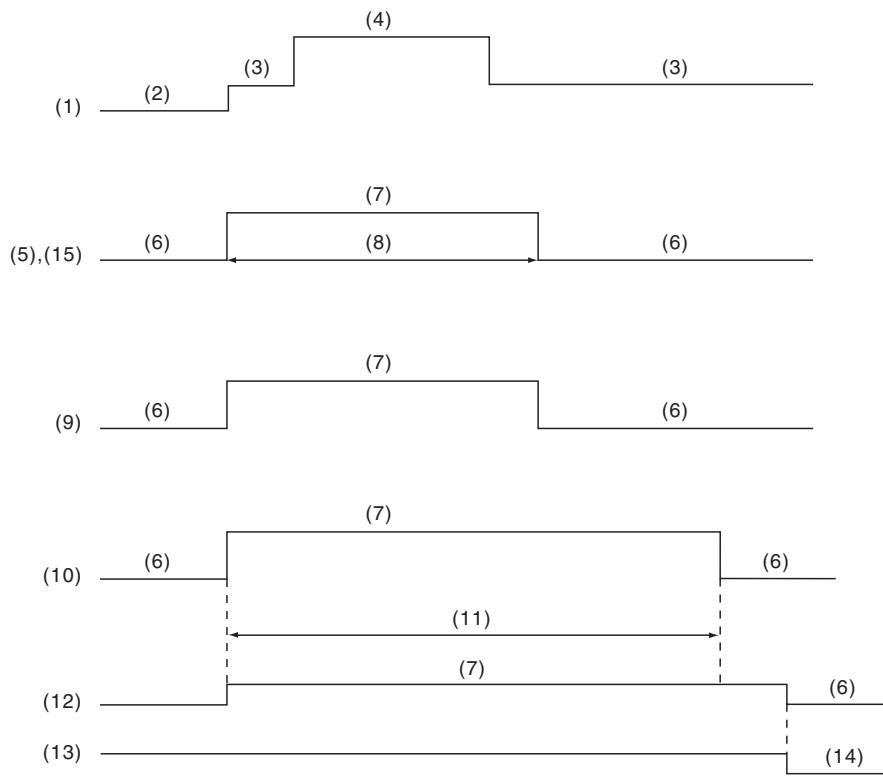


Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

10. Warning Light Illumination Pattern

A: INSPECTION



(1) Ignition switch	(6) Light OFF	(11) Several seconds (depending on engine coolant temperature)
(2) OFF	(7) Light ON	(12) Brake warning light (EBD warning light)
(3) ON	(8) 2 seconds	(13) Parking brake
(4) Engine start	(9) VDC OFF & VDC traction mode indicator light (6MT model) VDC OFF indicator light (5MT model)	(14) Released
(5) ABS warning light	(10) VDC warning light & VDC indicator light	(15) Hill start assist warning light

NOTE:

- The illumination pattern above shows proper condition.
- While hill start assist is OFF, hill start assist warning light (15) always illuminates to indicate that hill start assist does not operate. (6MT model only)

1) When warning lights or indicator lights do not illuminate in accordance with this illumination pattern, there must be an electrical malfunction.

2) When warning lights or indicator lights remain constantly OFF, check the combination meter circuit or CAN communication circuit. <Ref. to VDC(diag)-31, VDC WARNING LIGHT & VDC INDICATOR LIGHT, VDC OFF & VDC TRACTION MODE INDICATOR LIGHT DO NOT COME ON, Warning Light Illumination Pattern.> <Ref. to VDC(diag)-32, VDC WARNING LIGHT & VDC INDICATOR LIGHT, VDC OFF INDICATOR LIGHT DO NOT COME ON, Warning Light Illumination Pattern.> <Ref. to VDC(diag)-33, ABS WARNING LIGHT DOES NOT COME ON, Warning Light Illumination Pattern.> <Ref. to VDC(diag)-33, HILL START ASSIST WARNING LIGHT DOES NOT COME ON, Warning Light Illumination Pattern.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

3) When ABS warning light does not go off, check the combination meter circuit or CAN communication circuit. <Ref. to VDC(diag)-34, ABS WARNING LIGHT DOES NOT GO OFF, Warning Light Illumination Pattern.>

4) When hill start assist warning light does not go off, check the status of hill start assist OFF mode setting, combination meter circuit, or CAN communication circuit. <Ref. to VDC(diag)-35, HILL START ASSIST WARNING LIGHT DOES NOT GO OFF, Warning Light Illumination Pattern.>

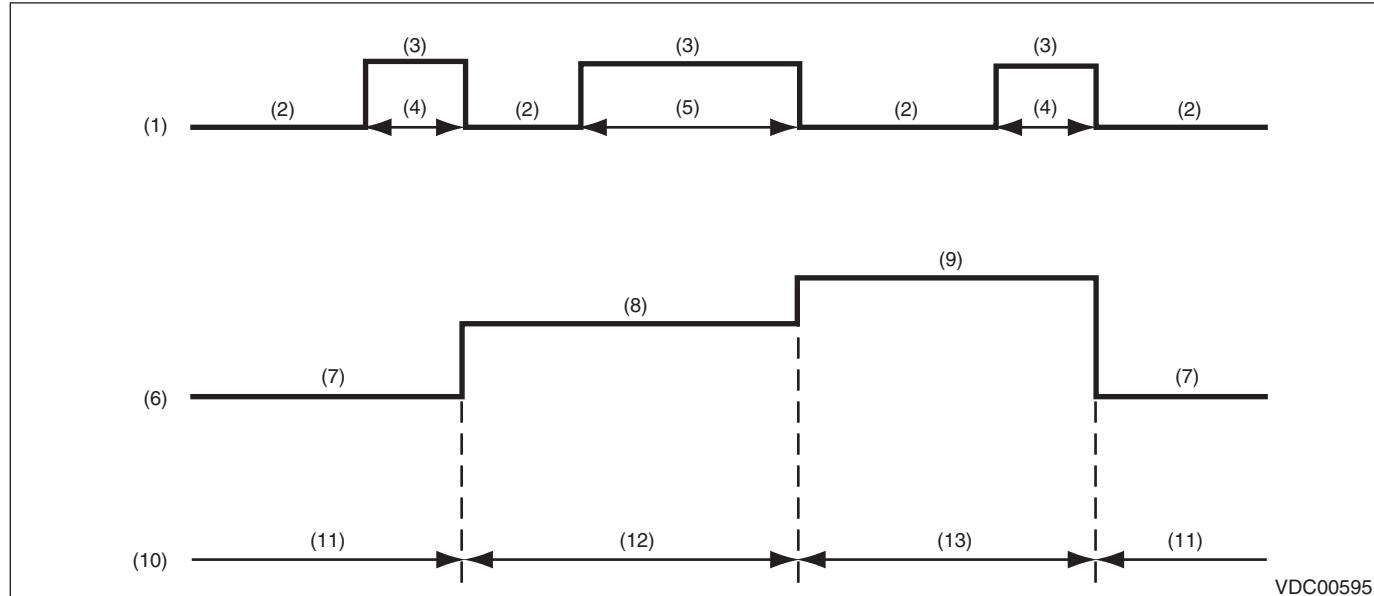
5) When the VDC OFF & VDC traction mode indicator light (6MT model), VDC OFF indicator light (5MT model), or VDC warning light & VDC indicator light does not go off, check the combination meter circuit or CAN communication circuit. <Ref. to VDC(diag)-36, VDC OFF & VDC TRACTION MODE INDICATOR LIGHT DO NOT GO OFF, Warning Light Illumination Pattern.> <Ref. to VDC(diag)-37, VDC OFF INDICATOR LIGHT DOES NOT GO OFF, Warning Light Illumination Pattern.> <Ref. to VDC(diag)-38, VDC WARNING LIGHT AND VDC INDICATOR LIGHT DO NOT GO OFF, Warning Light Illumination Pattern.>

NOTE:

- Even though the ABS warning light does not go off after 2 seconds from ABS warning light illumination, the ABS system operates normally when the warning light goes off while driving at approximately 12 km/h (7 MPH). However, the ABS system does not work while the ABS warning light is illuminated.
- It may take several minutes before the VDC warning light & VDC indicator light goes off, if the vehicle is parked under low temperature for a specified time. This is not defective because it is resulted from low engine coolant temperature.
- With the vehicle jack-up/lift-up or set on free rollers, when the wheels lock or spin after starting the engine, ABS warning light, and VDC warning light & VDC indicator light may illuminate because VDCCM&H/U detects the abnormal conditions from ABS wheel speed sensors. In this case, this is not a malfunction. Perform the Clear Memory Mode. <Ref. to VDC(diag)-27, Clear Memory Mode.>

6) Warning light illumination pattern at VDC mode change (6MT model only)

If the VDC OFF & VDC traction mode indicator light illumination pattern when the VDC OFF switch is operated does not match the following, check the VDC OFF switch circuit, CAN communication circuit or combination meter circuit. <Ref. to VDC(diag)-42, VDC TRACTION MODE, VDC MODE DOES NOT CHANGE, Warning Light Illumination Pattern.>



(1) VDC OFF switch

(2) OFF

(3) ON

(4) 2 seconds or less

(5) 2 seconds or more, 10 seconds or less

(6) VDC OFF & VDC traction mode indicator light

(7) Light OFF

(8) Green light

(9) Yellow illumination

(10) VDC mode

(11) Normal mode

(12) Traction mode

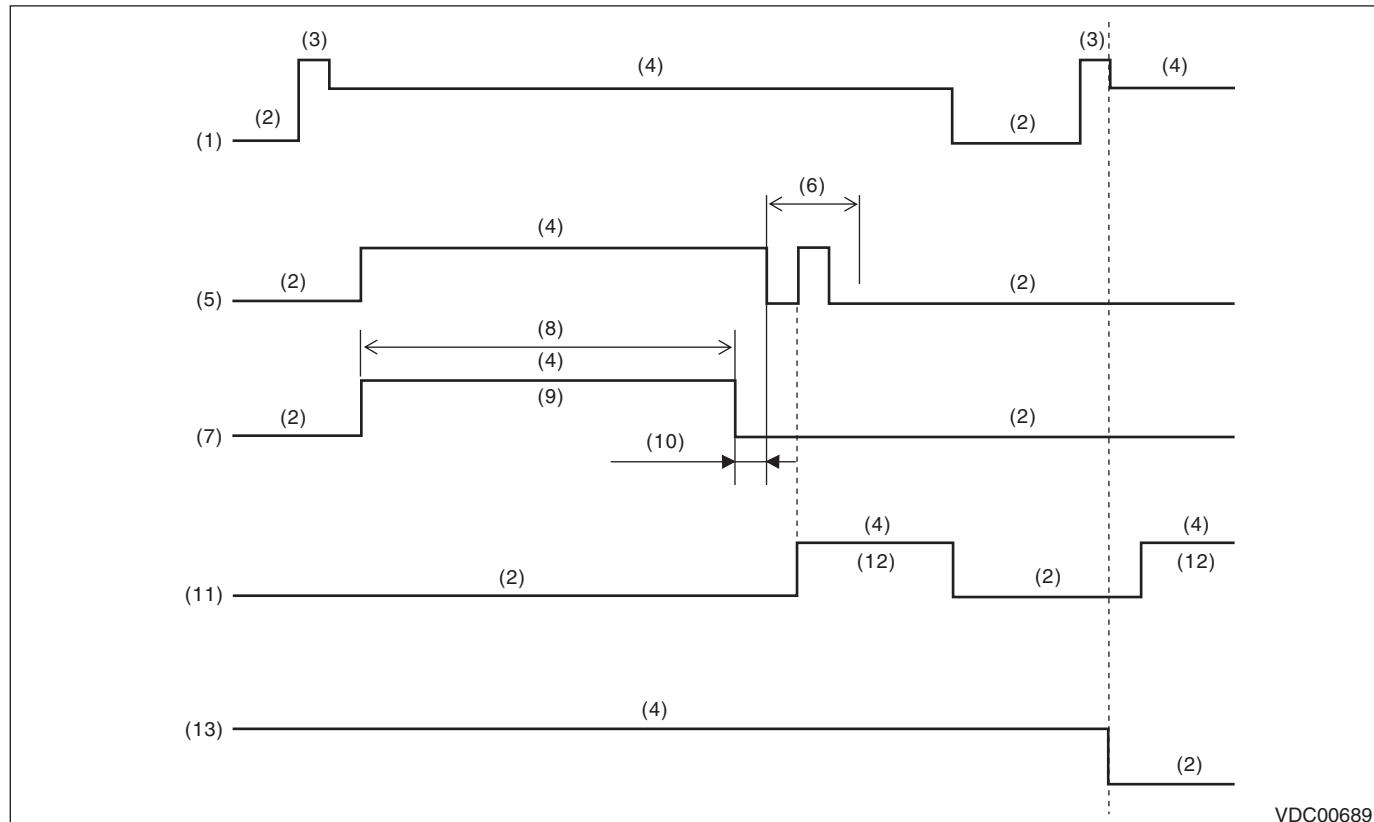
(13) OFF mode

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

7) Warning light illumination pattern at hill start assist OFF mode change (6MT model only)

When the VDC OFF switch is kept pressed, the VDC OFF & VDC traction mode indicator light illuminates in green at first, then turns yellow, and then goes off in approx. 8 seconds. If the switch is released in 5 seconds after the light goes off then pressed again in 2 seconds, hill start assist warning light illuminates then mode is changed to hill start assist OFF mode. If hill start assist function ON/OFF does not change, check VDC OFF switch circuit, CAN communication circuit or combination meter circuit. <Ref. to VDC(diag)-45, HILL START ASSIST ON/OFF MODE, VDC MODE DOES NOT CHANGE, Warning Light Illumination Pattern.>



(1) Ignition key	(6) 2 seconds or less	(10) 5 seconds or less
(2) OFF	(7) VDC OFF & VDC traction mode indicator light	(11) Hill start assist warning light
(3) Start	(8) Approx. 8 seconds (until (7) goes off)	(12) Yellow illumination
(4) ON	(9) Illumination changes from green to yellow.	(13) Hill start assist function
(5) VDC OFF switch		

NOTE:

- Hill start assist warning light always illuminates to inform that the hill start assist does not operate during hill start assist OFF mode.
- For procedure of changing hill start assist function ON/OFF, refer to "Hill start assist". <Ref. to BR-51, OPERATION, Hill Start Assist.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

B: VDC WARNING LIGHT & VDC INDICATOR LIGHT, VDC OFF & VDC TRACTION MODE INDICATOR LIGHT DO NOT COME ON

NOTE:

This diagnosis is applied to 6MT model.

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), the VDC OFF & VDC traction mode indicator light, and VDC warning light & VDC indicator light do not illuminate.

NOTE:

When the VDC OFF switch is pressed for 10 seconds or more, the VDC traction mode indicator light goes off, and subsequent switch operations are not accepted. When turning the ignition switch from OFF to ON, the OFF operation enabled status is restored.

Step	Check	Yes	No
1 CHECK OTHER INDICATOR LIGHT. Turn the ignition switch to ON.	Does other indicator light illuminate soon after "ON"?	Go to step 2.	Perform the self-diagnosis of combination meter. <Ref. to IDI-5, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>
2 CHECK VDCCM. When the engine does not start, display the current data of VDCCM using Subaru Select Monitor.	Is the «VDC Warning Light» output ON?	Go to step 3.	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>
3 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 4.
4 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

C: VDC WARNING LIGHT & VDC INDICATOR LIGHT, VDC OFF INDICATOR LIGHT DO NOT COME ON

NOTE:

This diagnosis is applied to 5MT model.

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), VDC OFF indicator light and VDC warning light & VDC indicator light do not illuminate.

NOTE:

When pressing the VDC OFF switch for 10 seconds or more, the VDC OFF indicator light goes off and cannot operate any more. When turning the ignition switch from OFF to ON, the OFF operation enabled status is restored.

Step	Check	Yes	No
1 CHECK OTHER INDICATOR LIGHT. Turn the ignition switch to ON.	Does other indicator light illuminate soon after "ON"?	Go to step 2.	Perform the self-diagnosis of combination meter. <Ref. to IDI-5, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>
2 CHECK VDCCM. When the engine does not start, display the current data of VDCCM using Subaru Select Monitor.	Is the «VDC Warning Light» output ON?	Go to step 3.	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>
3 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 4.
4 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

D: ABS WARNING LIGHT DOES NOT COME ON

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When the ignition switch is turned to ON (engine OFF), ABS warning light and hill start assist warning light do not come on.

Step	Check	Yes	No
1 CHECK OTHER LIGHTS TURN ON. Turn the ignition switch to ON. (engine OFF)	Do other warning lights illuminate?	Go to step 2.	Perform the self-diagnosis of combination meter. <Ref. to IDI-5, SELF-DIAGNOSIS, INSPECTION, Combination Meter System.>
2 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 3.
3 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 4.
4 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

E: HILL START ASSIST WARNING LIGHT DOES NOT COME ON

For the diagnostic procedures, refer to "ABS WARNING LIGHT DOES NOT COME ON". <Ref. to VDC(diag)-33, ABS WARNING LIGHT DOES NOT COME ON, Warning Light Illumination Pattern.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

F: ABS WARNING LIGHT DOES NOT GO OFF

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When starting the engine, the ABS warning light is kept ON.

Step	Check	Yes	No
1 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 2 .
2 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 3 .
3 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

G: HILL START ASSIST WARNING LIGHT DOES NOT GO OFF

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication

TROUBLE SYMPTOM:

When starting the engine, the hill start assist warning light is kept ON.

Step	Check	Yes	No
1 CHECK TRANSMISSION TYPE. Perform the procedure for releasing hill assist OFF mode. <Ref. to BR-51, OPERATION, Hill Start Assist.>	Is the transmission type 6MT?	Go to step 2.	Go to step 3.
2 RELEASE HILL ASSIST OFF MODE. Perform the procedure for releasing hill assist OFF mode. <Ref. to BR-51, OPERATION, Hill Start Assist.>	Does the hill start assist warning light go off?	VDC is normal.	Go to step 3.
3 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 4.
4 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 5.
5 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

H: VDC OFF & VDC TRACTION MODE INDICATOR LIGHT DO NOT GO OFF

NOTE:

This diagnosis is applied to 6MT model.

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication
- VDC OFF switch is shorted.

TROUBLE SYMPTOM:

When starting the engine, VDC OFF indicator light is kept ON.

NOTE:

When pressing the VDC OFF switch for 10 seconds or more, the VDC OFF indicator light goes off and cannot operate any more. When turning the ignition switch from OFF to ON, the OFF operation enabled status is restored.

Step	Check	Yes	No
1 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 CHECK VDC OFF SWITCH. Remove and check VDC OFF switch. <Ref. to VDC-29, VDC OFF Switch.>	Is the VDC OFF switch normal?	Go to step 3.	Replace the VDC OFF switch. <Ref. to VDC-29, VDC OFF Switch.>
3 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 4.
4 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

I: VDC OFF INDICATOR LIGHT DOES NOT GO OFF

NOTE:

This diagnosis is applied to 5MT model.

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication
- VDC OFF switch is shorted.

TROUBLE SYMPTOM:

When starting the engine, VDC OFF indicator light is kept ON.

NOTE:

When pressing the VDC OFF switch for 10 seconds or more, the VDC OFF indicator light goes off and cannot operate any more. When turning the ignition switch from OFF to ON, the OFF operation enabled status is restored.

Step	Check	Yes	No
1 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 CHECK VDC OFF SWITCH. Remove and check VDC OFF switch. <Ref. to VDC-29, VDC OFF Switch.>	Is the VDC OFF switch normal?	Go to step 3.	Replace the VDC OFF switch. <Ref. to VDC-29, VDC OFF Switch.>
3 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 4.
4 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

J: VDC WARNING LIGHT AND VDC INDICATOR LIGHT DO NOT GO OFF

DETECTING CONDITION:

- Defective combination meter
- Defective CAN communication
- Defective engine

TROUBLE SYMPTOM:

When starting the engine, the VDC warning light & VDC indicator light remains lit.

Step	Check	Yes	No
1 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 CHECK ENGINE.	Does the malfunction indicator light illuminate?	Repair the engine.	Go to step 3.
3 CHECK ENGINE COOLANT TEMPERATURE. Warm up the engine, and check if the VDC warning light & VDC indicator light illumination condition changes.	When the engine coolant temperature is too low, the VDC warning light & VDC indicator light illuminates. Do the lights go off when the engine is warmed up?	Current condition is normal.	Go to step 4.
4 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 5.
5 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

K: BRAKE WARNING LIGHT DOES NOT GO OFF

DETECTING CONDITION:

- Brake warning light circuit is shorted.
- Defective sensor/connector
- Defective CAN communication

TROUBLE SYMPTOM:

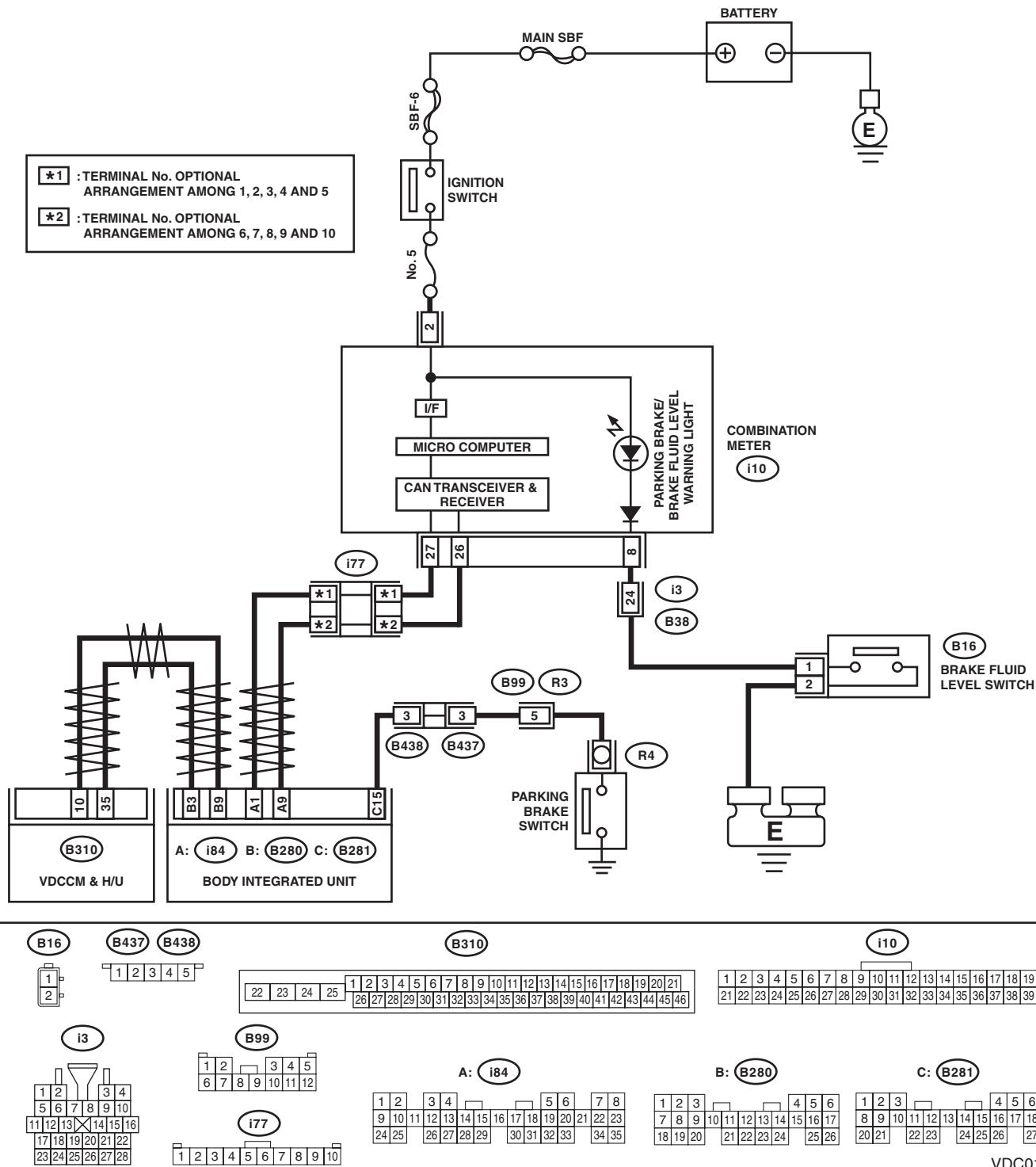
After starting the engine, the brake warning light remains lit though the parking lever is released.

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

WIRING DIAGRAM:

Parking brake / brake fluid level warning light system <Ref. to WI-151, Parking Brake / Brake Fluid Level Warning Light System.>



Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
1 CHECK INSTALLATION OF VDCCM&H/U CONNECTOR. 1) Turn the ignition switch to OFF. 2) Check that the VDCCM&H/U connector is inserted until it is locked by clamp.	Is the connector firmly inserted?	Go to step 2.	Insert the VDCCM&H/U connector until it is locked by clamp.
2 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 3.
3 CHECK BRAKE FLUID AMOUNT. Check the amount of brake fluid in the reservoir tank of master cylinder.	Does the level of the brake fluid amount fall between the lines of "MAX" and "MIN"?	Go to step 4.	Replenish brake fluid to the specified value.
4 CHECK BRAKE FLUID LEVEL SWITCH. 1) Turn the ignition switch to OFF. 2) Disconnect the level switch connector (B16) from master cylinder. 3) Measure the resistance of master cylinder terminals. <i>Terminals</i> <i>No. 1 — No. 2:</i>	Is the resistance 1 MΩ or more?	Go to step 5.	Replace the master cylinder. <Ref. to BR-33, Master Cylinder.>
5 CHECK GROUND SHORT OF HARNESS. 1) Disconnect the connector (i10) from combination meter. 2) Measure the resistance between combination meter connector and chassis ground. <i>Connector & terminal</i> <i>(i10) No. 8 — Chassis ground:</i>	Is the resistance 1 MΩ or more?	Go to step 6.	Repair the harness between combination meter and brake fluid level switch.
6 CHECK PARKING BRAKE SWITCH. 1) Disconnect the connector (R4) from parking brake switch. 2) Release the parking brake. 3) Measure the resistance between parking brake switch terminal and chassis ground.	Is the resistance 1 MΩ or more?	Go to step 7.	Replace the parking brake switch.
7 CHECK GROUND SHORT OF HARNESS. 1) Disconnect the connector (B281) from body integrated unit. 2) Measure the resistance between body integrated unit connector and chassis ground. <i>Connector & terminal</i> <i>(B281) No. 15 — Chassis ground:</i>	Is the resistance 1 MΩ or more?	Go to step 8.	Repair the harness between body integrated unit and parking brake switch.
8 CHECK POOR CONTACT OF CONNECTOR. Check for poor contact of all connectors.	Is there poor contact?	Repair the connector.	Go to step 9.
9 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 10.
10 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

L: VDC MODE DOES NOT CHANGE

1. VDC TRACTION MODE

NOTE:

This diagnosis is applied to 6MT model.

DETECTING CONDITION

- Defective combination meter
- Defective CAN communication
- Defective VDC OFF switch

TROUBLE SYMPTOM:

Even when the VDC OFF switch is operated, the VDC traction mode indicator light does not illuminate, or the illumination color does not change. (The VDC mode does not change)

NOTE:

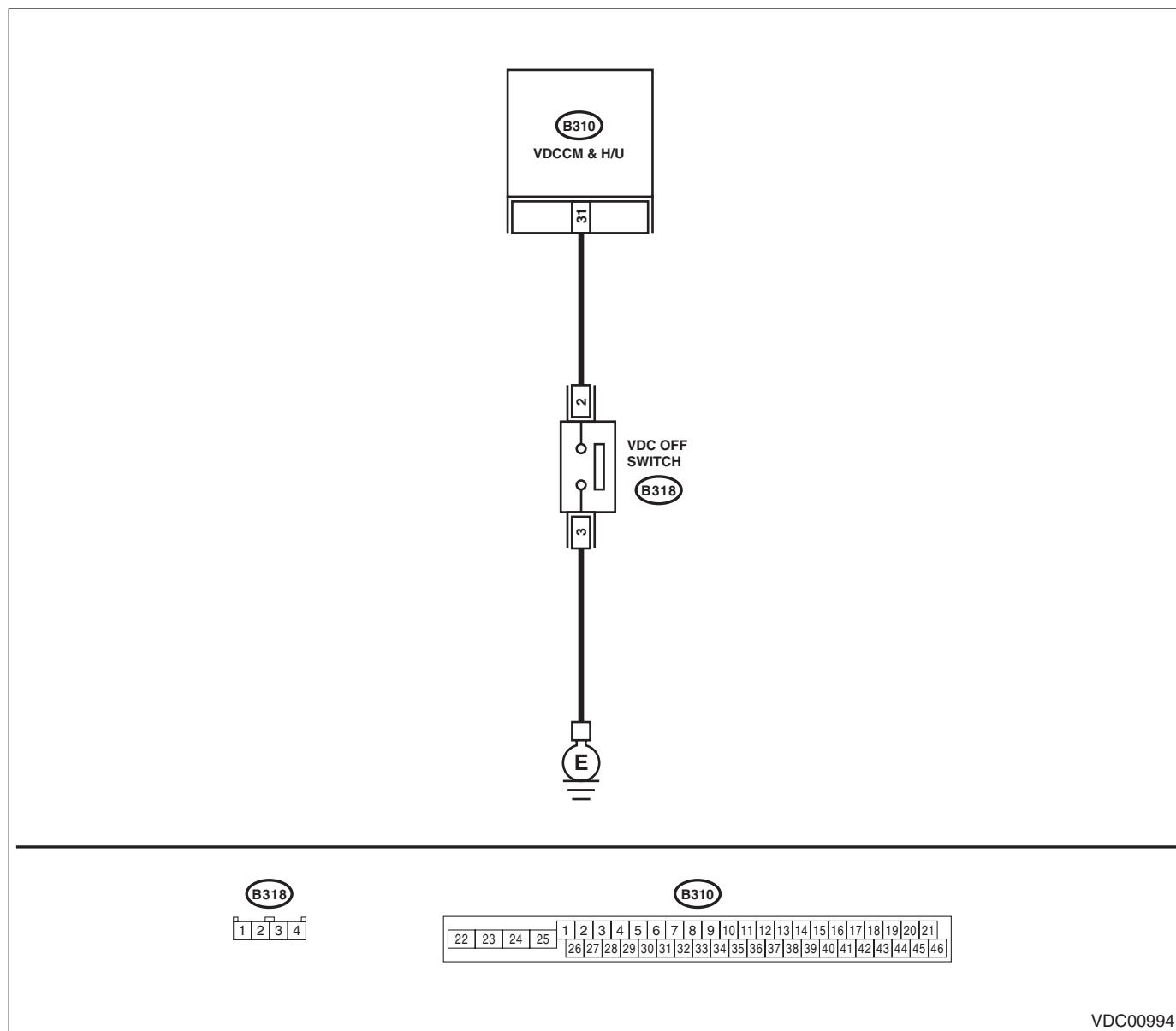
- When the VDC OFF switch is pressed (2 seconds or less), the VDC traction mode indicator light illuminates in green. (Traction mode)
- When the VDC OFF switch is held down (2 seconds or more, 10 seconds or less), the VDC OFF indicator light illuminates in yellow. (VDC OFF mode)
- When the VDC OFF switch is pressed for 10 seconds or more, the VDC traction mode indicator light goes off, and subsequent switch operations are not accepted. When turning the ignition switch from OFF to ON, the OFF operation enabled status is restored.

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

WIRING DIAGRAM:

Vehicle Dynamics Control System <Ref. to WI-67, Vehicle Dynamics Control System.>



Step	Check	Yes	No
1 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U and VDC OFF switch. 3) Measure the resistance of harness between the VDCCM&H/U and VDC OFF switch connectors. <i>Connector & terminal</i> (B310) No. 31 — (B318) No. 2:	Is the resistance less than 1 Ω?	Go to step 3.	Repair the harness between the VDCCM&H/U and VDC OFF switch connectors.

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK GROUND SHORT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal (B310) No. 31 — Chassis ground:</i>	Is the resistance 1 MΩ or more?	Go to step 4.	Repair the harness between the VDCCM&H/U and VDC OFF switch connectors.
4 CHECK HARNESS. Measure the resistance of harness between VDC OFF switch connector and chassis ground. <i>Connector & terminal (B318) No. 3 — Chassis ground:</i>	Is the resistance less than 10 Ω?	Go to step 5.	Repair the harness between the VDC OFF switch connector and chassis ground.
5 CHECK VDC OFF SWITCH. Check the VDC OFF switch. <Ref. to VDC-29, INSPECTION, VDC OFF Switch.>	Is the VDC OFF switch normal?	Go to step 6.	Replace the VDC OFF switch. <Ref. to VDC-29, VDC OFF Switch.>
6 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 7.
7 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>

2. HILL START ASSIST ON/OFF MODE

DETECTING CONDITION

- Defective combination meter
- Defective CAN communication
- Defective VDC OFF switch

TROUBLE SYMPTOM:

Hill start assist warning light does not illuminate or go off when hill start assist function ON/OFF is changed.
(Hill start assist mode does not change.)

NOTE:

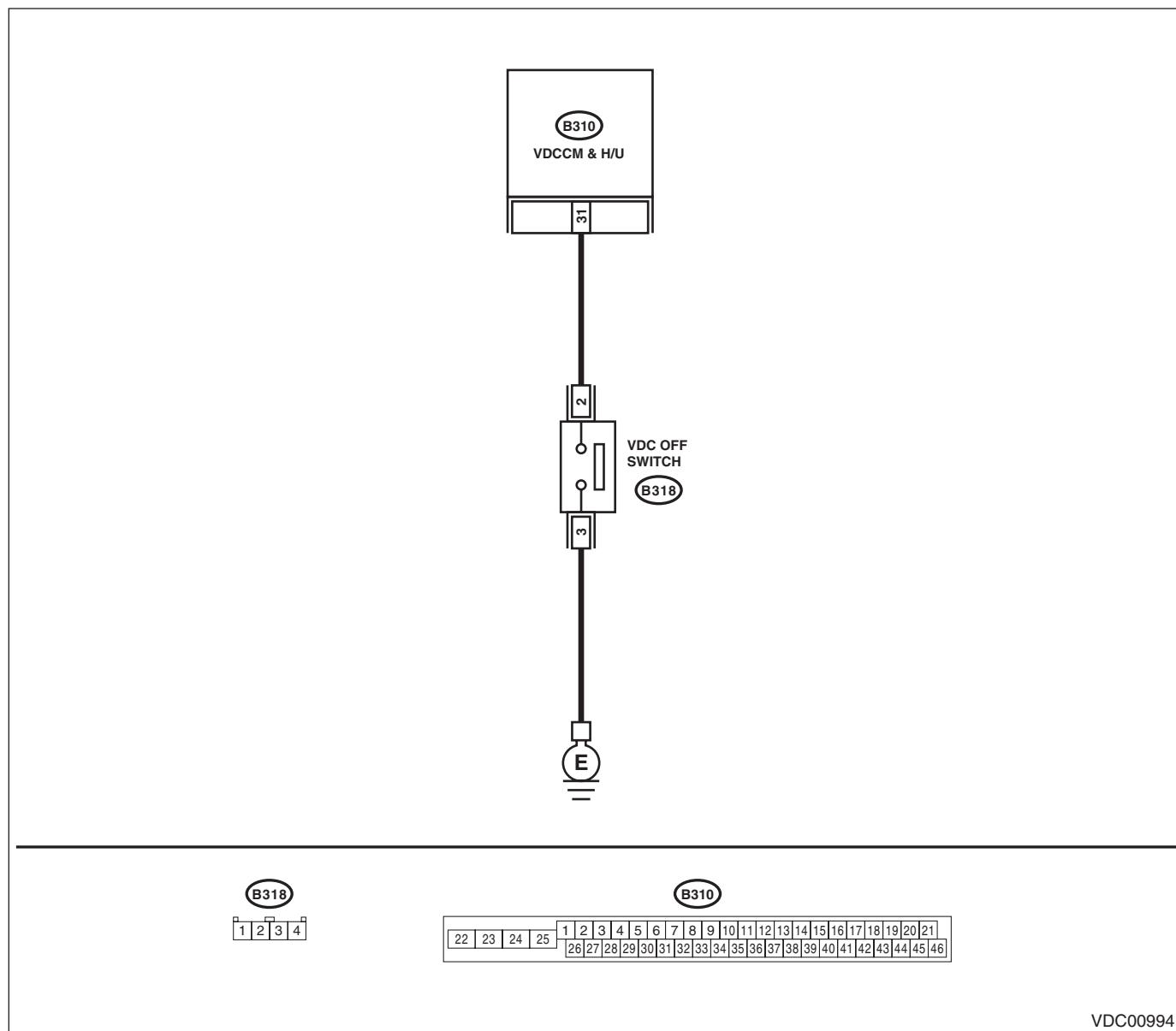
- When the VDC OFF switch is kept pressed, the VDC traction mode indicator light illuminates in green at first, then turns yellow, and then goes off in approx. 8 seconds. If the switch is released in 5 seconds after the light goes off then pressed again in 2 seconds, hill start assist warning light illuminates then mode is changed to hill start assist OFF mode.
- Hill start assist warning light always illuminates to inform that the hill start assist does not operate during hill start assist OFF mode.
- For procedure of changing hill start assist function ON/OFF, refer to "Hill start assist". <Ref. to BR-51, OPERATION, Hill Start Assist.>
- When the VDC OFF switch is held down for 10 seconds or more and the VDC traction mode indicator light goes off, if the switch is not pressed again within 5 seconds, subsequent switch operations will not be accepted. When turning the ignition switch from OFF to ON, the operation enabled status is restored.

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

WIRING DIAGRAM:

Vehicle Dynamics Control System <Ref. to WI-67, Vehicle Dynamics Control System.>



Step	Check	Yes	No
1 READ DTC. Read the DTC. <Ref. to VDC(diag)-25, Read Diagnostic Trouble Code (DTC).>	Is DTC displayed?	Perform the diagnosis according to DTC. <Ref. to VDC(diag)-48, List of Diagnostic Trouble Code (DTC).>	Go to step 2.
2 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from the VDCCM&H/U and VDC OFF switch. 3) Measure the resistance of harness between the VDCCM&H/U and VDC OFF switch connectors. <i>Connector & terminal</i> <i>(B310) No. 31 — (B318) No. 2:</i>	Is the resistance less than 1 Ω?	Go to step 3.	Repair the harness between the VDCCM&H/U and VDC OFF switch connectors.

Warning Light Illumination Pattern

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Step	Check	Yes	No
3 CHECK GROUND SHORT OF HARNESS. Measure the resistance between VDCCM&H/U connector and chassis ground. <i>Connector & terminal (B310) No. 31 — Chassis ground:</i>	Is the resistance 1 MΩ or more?	Go to step 4.	Repair the harness between the VDCCM&H/U and VDC OFF switch connectors.
4 CHECK HARNESS. Measure the resistance of harness between VDC OFF switch connector and chassis ground. <i>Connector & terminal (B318) No. 3 — Chassis ground:</i>	Is the resistance less than 10 Ω?	Go to step 5.	Repair the harness between the VDC OFF switch connector and chassis ground.
5 CHECK VDC OFF SWITCH. Check the VDC OFF switch. <Ref. to VDC-29, INSPECTION, VDC OFF Switch.>	Is the VDC OFF switch normal?	Go to step 6.	Replace the VDC OFF switch. <Ref. to VDC-29, VDC OFF Switch.>
6 CHECK LAN SYSTEM. Perform the diagnosis for LAN system. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Is there any fault in LAN system?	Perform the diagnosis according to DTC for LAN system. <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>	Go to step 7.
7 CHECK COMBINATION METER. Check the combination meter. <Ref. to IDI-5, INSPECTION, Combination Meter System.>	Is combination meter OK?	Replace the VDCCM only. <Ref. to VDC-12, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>	Replace the combination meter. <Ref. to IDI-16, Combination Meter.>