

# General Description

VEHICLE DYNAMICS CONTROL (VDC)

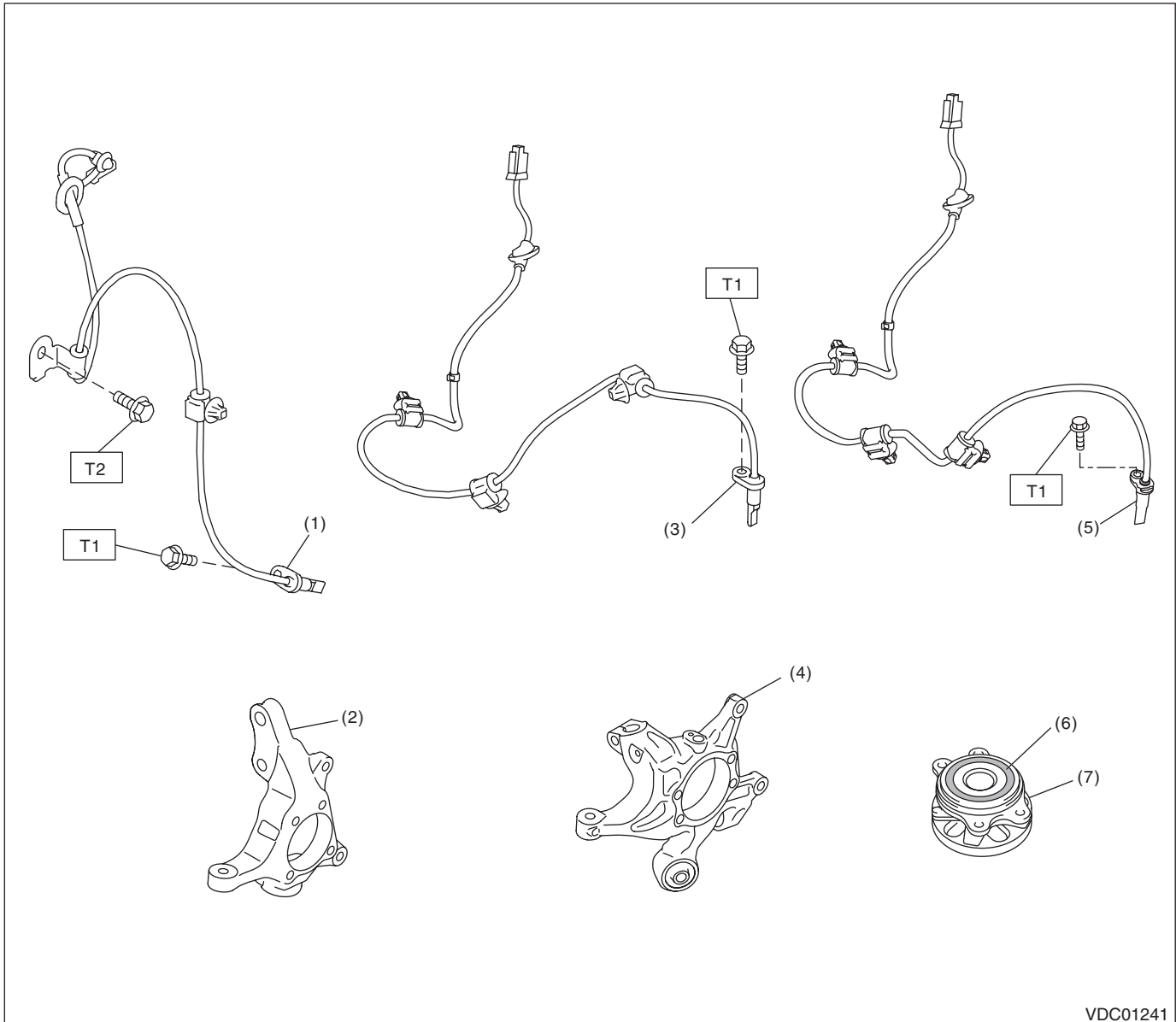
## 1. General Description

### A: SPECIFICATION

Item				Specification or identification
ABS wheel speed sensor	ABS wheel speed sensor gap (for reference)	Front		0.77 — 1.43 mm (0.030 — 0.056 in)
		Rear		0.44 — 1.76 mm (0.017 — 0.069 in)
	Identifications of harness (symbol)	Front	RH	Z1
			LH	Z2
		Rear	RH (except for XV model)	Z3
			RH (XV model)	Z5
			LH (except for XV model)	Z4
			LH (XV model)	Z6
VDCCM&H/U identification		Models without EyeSight	Gasoline engine model	XQ
			HEV model	XX
		Models with EyeSight		XW

## B: COMPONENT

### 1. ABS WHEEL SPEED SENSOR



- (1) Front ABS wheel speed sensor
- (2) Housing ASSY - front axle
- (3) Rear ABS wheel speed sensor (except for XV model)
- (4) Housing ASSY - rear axle

- (5) Rear ABS wheel speed sensor (XV model)
- (6) Magnetic encoder
- (7) Hub unit COMPL

**Tightening torque: N-m (kgf-m, ft-lb)**

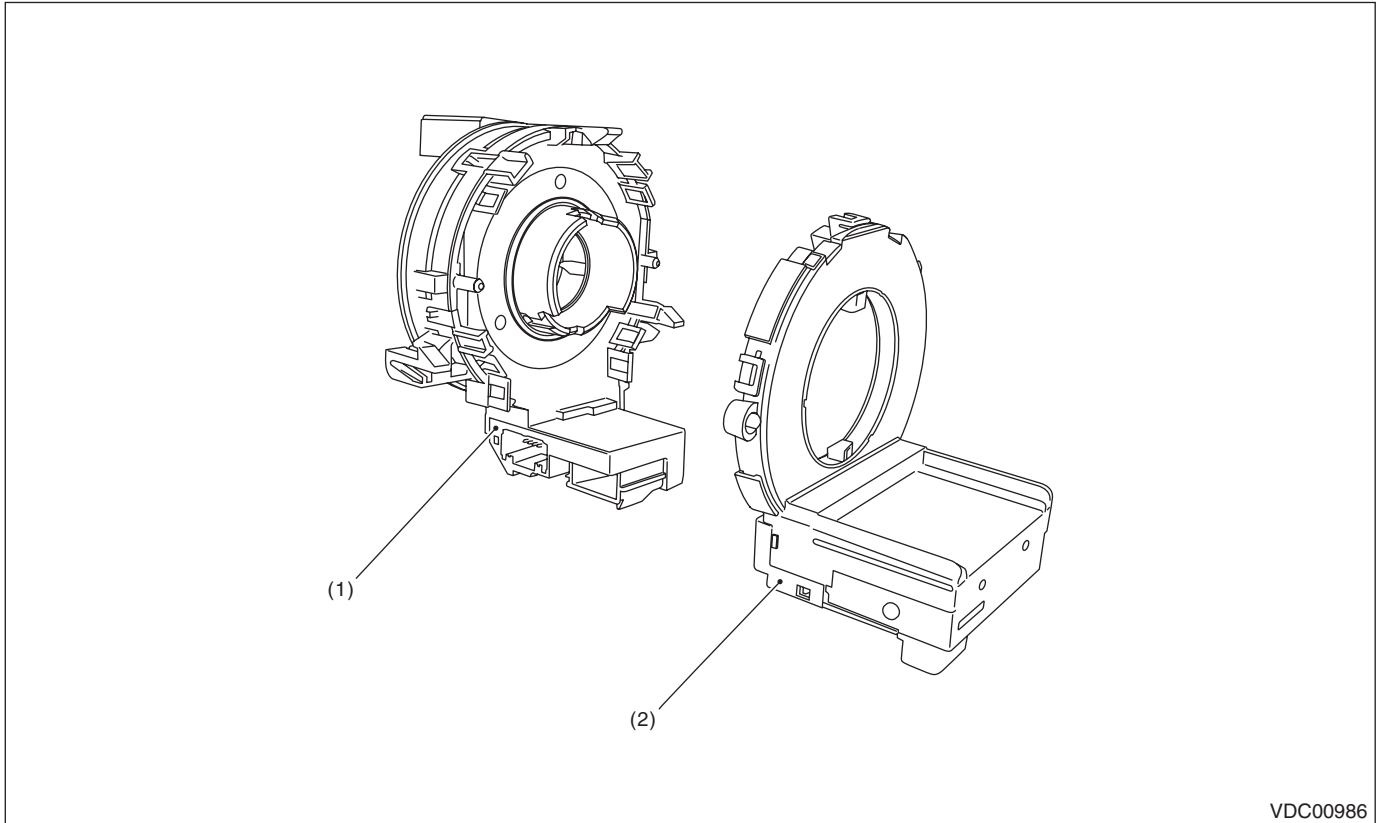
**T1: 7.5 (0.8, 5.5)**

**T2: 33 (3.4, 24.3)**

# General Description

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## 2. STEERING ANGLE SENSOR



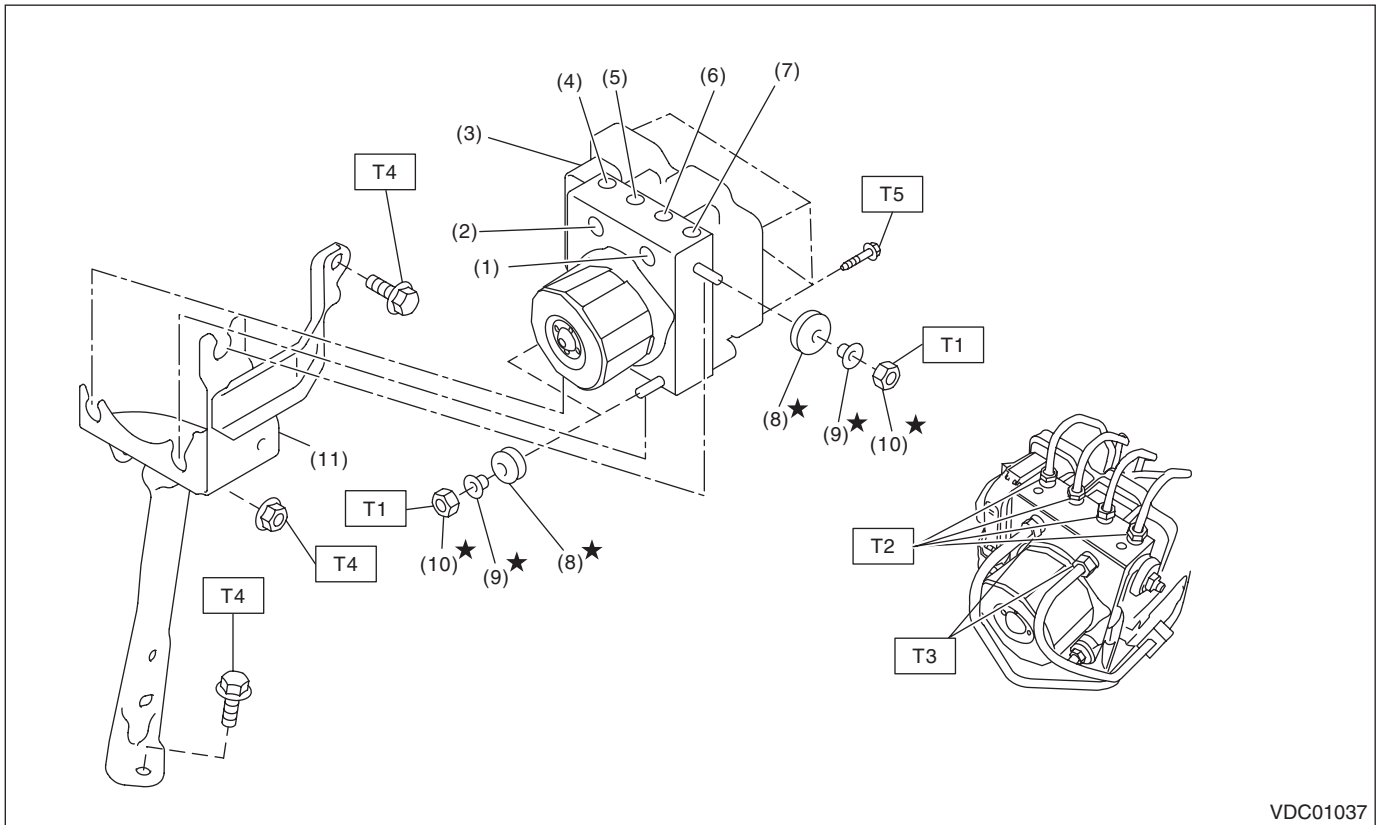
VDC00986

(1) Steering roll connector

(2) Steering angle sensor

## 3. VDC CONTROL MODULE & HYDRAULIC CONTROL UNIT (VDCCM&H/U)

- Models without EyeSight



VDC01037

- |   |                               |
|---|-------------------------------|
| (1) Primary inlet   | (7) Rear LH outlet            |
| (2) Secondary inlet   | (8) Damper - hydraulic unit   |
| (3) VDC control module and hydraulic control unit (VDCCM&H/U) | (9) Spacer                    |
| (4) Rear RH outlet  | (10) Nut                      |
| (5) Front LH outlet   | (11) Bracket - hydraulic unit |
| (6) Front RH outlet   |                               |

### ***Tightening torque: N·m (kgf-m, ft-lb)***

***T1: 7.5 (0.8, 5.5)***

***T2: 15 (1.5, 11.1)***

***T3: 19 (1.9, 14.0)***

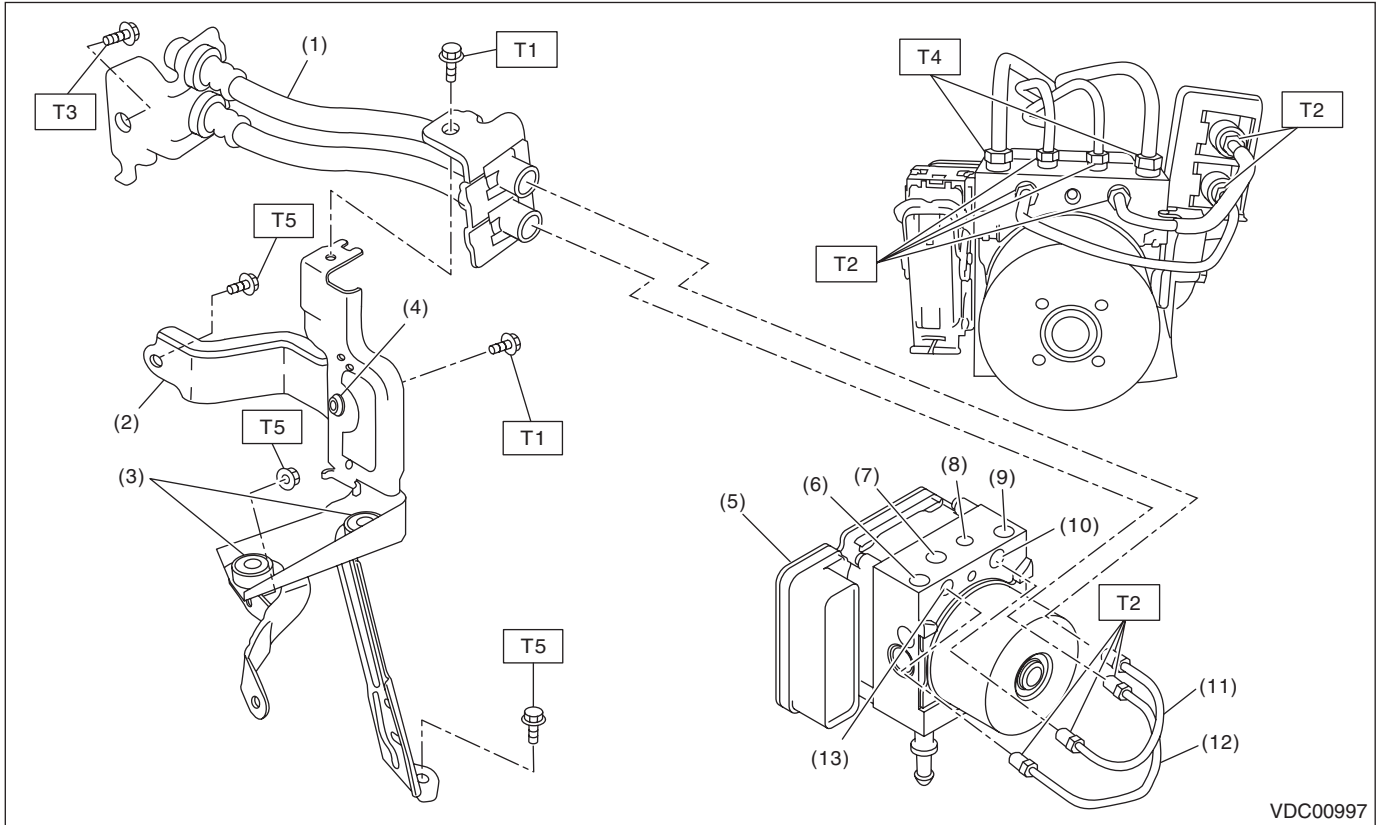
***T4: 33 (3.4, 24.3)***

***T5: <Ref. to VDC-23, REPLACEMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>***

# General Description

## VEHICLE DYNAMICS CONTROL (VDC)

### • Models with EyeSight



VDC00997

- |   |                     |
|---|---------------------|
| (1) Hose ASSY   | (8) Front RH outlet |
| (2) Bracket - hydraulic unit                                  | (9) Primary inlet   |
| (3) Damper - hydraulic unit                                   | (10) Rear LH outlet |
| (4) Spacer  | (11) Pipe A         |
| (5) VDC control module and hydraulic control unit (VDCCM&H/U) | (12) Pipe B         |
| (6) Secondary inlet   | (13) Rear RH outlet |
| (7) Front LH outlet   |                     |

#### **Tightening torque: N·m (kgf-m, ft-lb)**

**T1: 7.5 (0.8, 5.5)**

**T2: 15 (1.5, 11.1)**

**T3: 18 (1.8, 13.3)**

**T4: 19 (1.9, 14.0)**

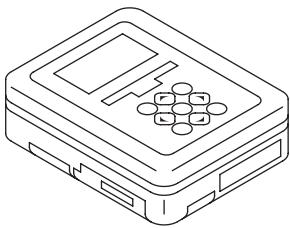
**T5: 33 (3.4, 24.3)**

### C: CAUTION

- Wear appropriate work clothing, including a helmet, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground cable from battery.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- When removing, installing or replacing the VDCCM&H/U, VDCCM&H/U bracket, steering wheel or steering angle sensor, perform "VDC sensor midpoint setting mode" of the VDC. <Ref. to VDC-26, VDC SENSOR MIDPOINT SETTING MODE (MODELS WITHOUT EyeSight), ADJUSTMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>

### D: PREPARATION TOOL

#### 1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST1B022XU0	1B022XU0	SUBARU SELECT MONITOR III KIT	Used for setting of each function and trouble-shooting for electrical system. <b>NOTE:</b> For detailed operation procedures of SUBARU SELECT MONITOR III, refer to "PC application help for Subaru Select Monitor".

#### 2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance and voltage.
Pressure gauge	Used for measuring oil pressure.
Oscilloscope	Used for measuring the sensor.
Steering wheel puller	Used for removing the steering wheel.