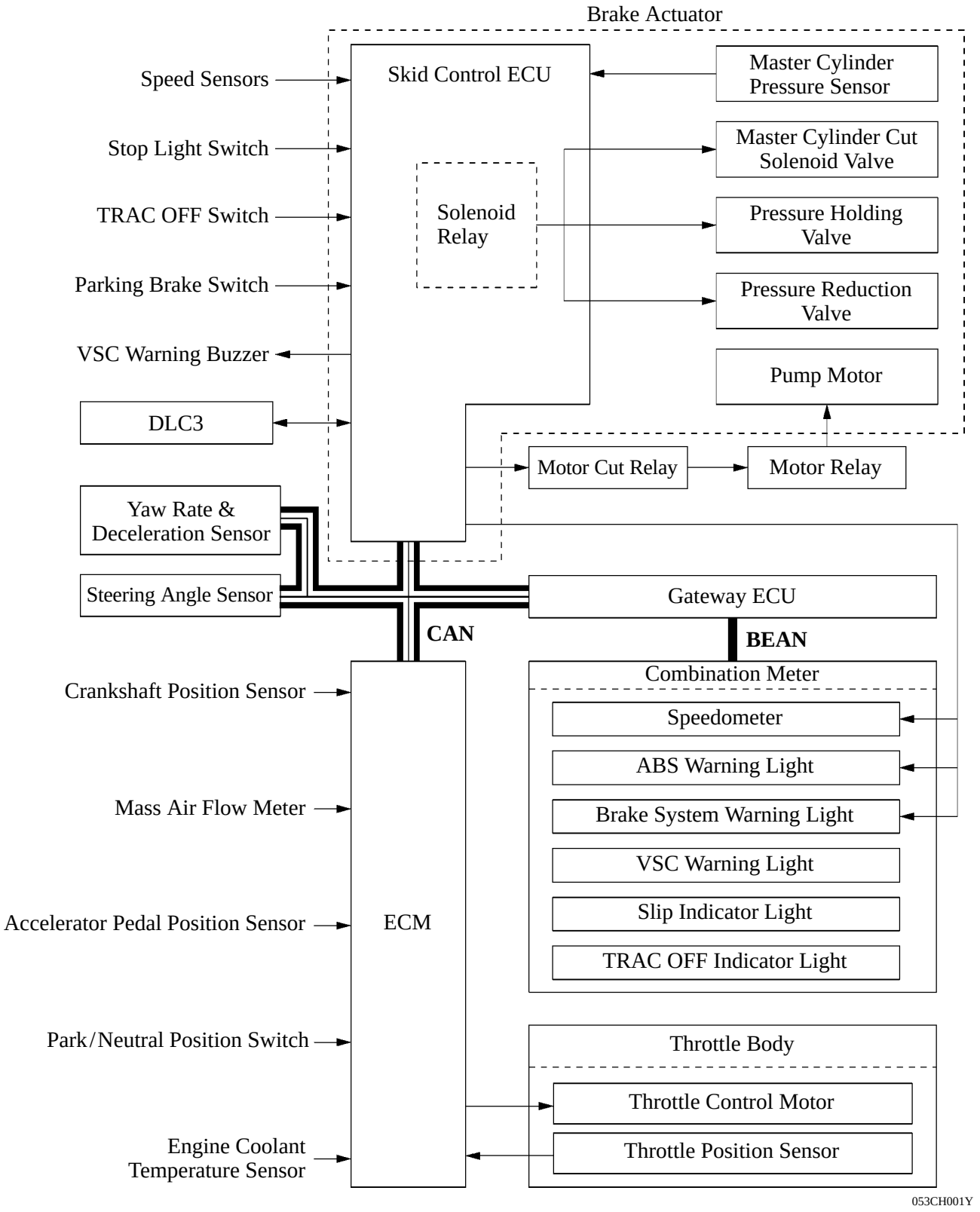
BRAKE

■BRAKE CONTROL SYSTEM (ABS, EBD, BRAKE ASSIST, TRAC, VSC)

1. General

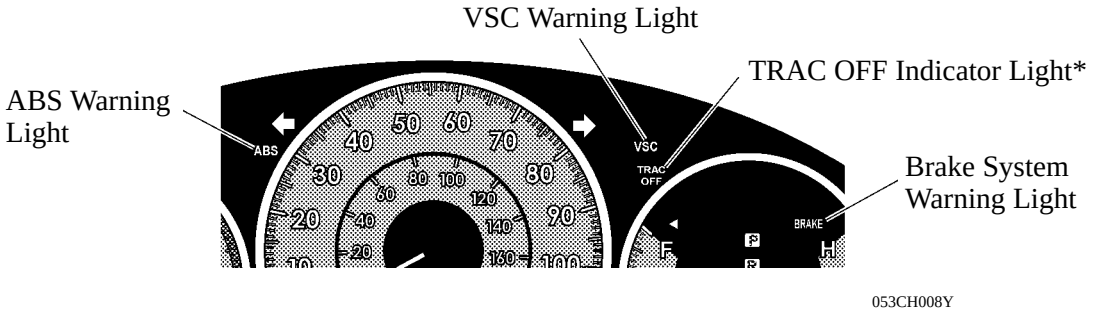
The CAN (Controller Area Network) communication is used between the skid control ECU and ECM.

2. System Diagram



3. Self-diagnosis

- If the skid control ECU detects a malfunction in each function (ABS, EBD, Brake Assist, TRAC, VSC), the ABS, brake system or VSC warning light, or TRAC OFF indicator light* in the combination meter that corresponds to the function for which the malfunction has been detected illuminates, to alert the driver of the malfunction.



○: Light ON —: Light OFF

Item	ABS	EBD	Brake Assist	TRAC	VSC
ABS Warning Light	○	—	○	—	—
TRAC OFF Indicator Light*	—	—	—	○	○
VSC Warning Light	—	—	—	○	○
Brake System Warning Light	—	○	—	—	—

*: Only for 2WD Models

- At the same time, the DTCs (Diagnostic Trouble Codes) are stored in memory. The DTCs can be read by connecting a hand-held tester to the DLC3, or by connecting the SST (09843-18040) between the TC and CG terminals of the DLC3, and observing the blinking of the ABS warning light and VSC warning light. For details on the DTCs that are stored in the skid control ECU memory and the DTCs that are output through the sensor check function, see the 2007 Sienna Repair Manual (Pub. No. RM0530U).

▶ DTC Chart (Blinking ABS Warning Light) ◀

DTC No.		Detection Item	DTC No.		Detection Item
2-digit	5-digit		2-digit	5-digit	
11	C0278	Open in ABS solenoid relay circuit	23	C0246	SRR solenoid circuit
12	C0279	Short to B+ in ABS solenoid relay circuit	24	C0256	SRL solenoid circuit
13	C0273	Open in ABS motor relay circuit	25	C1225	SM solenoid circuit
14	C0274	Short to B+ in ABS motor relay circuit	31	C0200	Front speed sensor RH circuit
21	C0226	SFR solenoid circuit	32	C0205	Front speed sensor LH circuit
22	C0236	SFL solenoid circuit	33	C0210	Rear speed sensor RH circuit

(Continued)

DTC No.		Detection Item	DTC No.		Detection Item
2-digit	5-digit		2-digit	5-digit	
34	C0215	Rear speed sensor LH circuit	45	C1245	Acceleration sensor output malfunction
35	C1235	Foreign object is attached on tip of front speed sensor RH	46	C1246	Master cylinder pressure sensor malfunction
36	C1236	Foreign object is attached on tip of front speed sensor LH	49	C1249	Open in stop light switch circuit
38	C1238	Foreign object is attached on tip of rear speed sensor RH	51	C1251	Open in pump motor circuit
39	C1239	Foreign object is attached on tip of rear speed sensor LH	91	C1361	Short circuit in ABS motor fail safe relay circuit
41	C1241	Low battery positive voltage	94	U0073	Control module communication bus off
43	C1243	Acceleration sensor stuck malfunction	95	U0124	Lost communication with lateral acceleration sensor module
44	C1244	Open or short in deceleration sensor circuit	97	C1381	Yaw rate and/or acceleration sensor power supply voltage malfunction

▶ DTC Chart of Sensor Check (Blinking ABS Warning Light) ◀

DTC No.		Detection Item	DTC No.		Detection Item
2-digit	5-digit		2-digit	5-digit	
71	C1271	Low output signal of front speed sensor RH	76	C1276	Abnormal change in output signal of front speed sensor LH
72	C1272	Low output signal of front speed sensor LH	77	C1277	Abnormal change in output signal of rear speed sensor RH
73	C1273	Low output signal of rear speed sensor RH	78	C1278	Abnormal change in output signal of rear speed sensor LH
74	C1274	Low output signal of rear speed sensor LH	79	C1279	Deceleration sensor output voltage malfunction
75	C1275	Abnormal change in output signal of front speed sensor RH	81	C1281	Master cylinder pressure sensor output malfunction

▶ DTC Chart (Blinking VSC Warning Light) ◀

DTC No.		Detection Item	DTC No.		Detection Item
2-digit	5-digit		2-digit	5-digit	
31	C1231	Steering angle sensor circuit malfunction	51	C1201	Engine control system malfunction
32	C1232	Acceleration sensor stuck malfunction	53	C1203	ECM communication circuit malfunction
34	C1234	Yaw rate sensor malfunction	62	U0123	Lost communication with yaw rate sensor module
36	C1210	Zero point calibration of yaw rate sensor undone	63	U0126	Lost communication with steering angle sensor module
39	C1336	Zero point calibration of deceleration sensor undone	65	U0100	Lost communication with ECM/PCM
43	C1223	ABS control system malfunction	66	C1290	Steering angle sensor zero point malfunction

▶ DTC Chart of Sensor Check (Blinking VSC Warning Light) ◀

DTC No.		Detection Item
2-digit	5-digit	
71	C0371	Yaw rate sensor