PROBLEM SYMPTOMS TABLE

If a normal system code is displayed during the DTC check but the problem still occurs, check the circuits for each problem symptom in the order given in the table below and proceed to the relevant troubleshooting page.

NOTICE:

When replacing the brake actuator assembly or sensor, turn the ignition switch off.

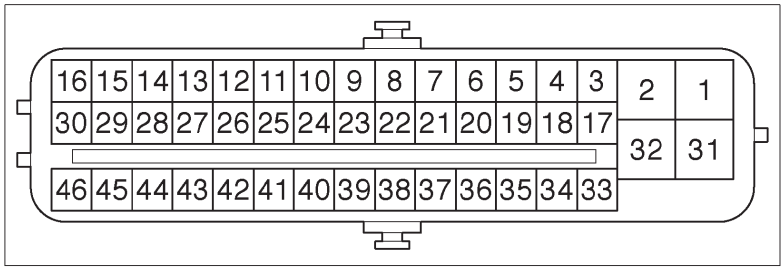
ANTI-LOCK BRAKE SYSTEM

Symptom	Suspected Area	See page
ABS does not operate	When the following 1. to 5. are all normal and the problem still occurs, replace the brake actuator assembly.	BC-198
	1. Check the DTC reconfirming that the normal code is output.	BC-13
	2. IG power source circuit	BC-45
	3. Front speed sensor circuit	BC-21
	4. Rear speed sensor circuit	BC-28
	5. Check the brake actuator with the intelligent tester.	BC-197
	If abnormal, check the hydraulic circuit for leakage.	-
ABS does not operate efficiently	When the following 1. to 5. are all normal and the problem still occurs, replace the brake actuator assembly.	BC-198
	1. Check the DTC reconfirming that the normal code is output.	BC-13
	2. Front speed sensor circuit	BC-21
	3. Rear speed sensor circuit	BC-28
	4. Stop light switch circuit	BC-48
	5. Check the brake actuator with the intelligent tester.	BC-197
	If abnormal, check the hydraulic circuit for leakage.	-
ABS warning light abnormality	1. ABS warning light circuit (Remains on)	BC-53
	2. ABS warning light circuit (Does not come on)	BC-57
	3. Skid control ECU (brake actuator assembly)	BC-198
DTC check cannot be done	When the following 1. and 3. are all normal and the problem still occurs, replace the brake actuator assembly.	BC-198
	1. ABS warning light circuit (Remains on)	BC-53
	2. ABS warning light circuit (Does not come on)	BC-57
	3. TC and CG terminal circuit	BC-66
Speed sensor signal check cannot be done	1. Skid control ECU (brake actuator assembly)	BC-198

TERMINALS OF ECU

1. Terminals of ECU

Skid Control ECU:



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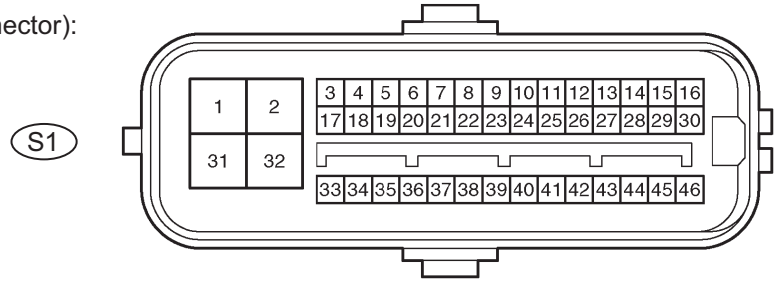
Symbols (Terminal No.)	Terminal Description
GND1 (1)	Skid control ECU ground
+BS (2)	Solenoid valve power supply
P (6)	P range switch input
FL- (9)	Front LH wheel speed signal input (-)
FL+ (10)	Front LH wheel speed signal input (+)
D/G (13)	Diagnosis tester communication line
STP (14)	Stop light switch input
RL+ (15)	Rear LH wheel speed signal input (+)
RL- (16)	Rear LH wheel speed signal input (-)
WA (17)	ABS warning light output
SP1 (18)	Speed signal output for meter
TS (20)	Sensor diagnosis check input
TC (21)	Diagnosis tester communication line
PKB (23)	Parking brake switch input
+BM (31)	Motor relay power supply
GND2 (32)	Skid control ECU ground
WTIR (33)	WTIR input for meter
TSI (34)	TSI input for meter
N (36)	N range switch input
FR- (39)	Front RH wheel speed signal input (-)
FR+ (40)	Front RH wheel speed signal input (+)
INIT (41)	Tire pressure warning switch input
BRL (43)	BRAKE warning light output
RR+ (44)	Rear RH wheel speed signal input (+)
RR- (45)	Rear RH wheel speed signal input (-)
IG1 (46)	ECU power supply

2. Terminal Inspection

(a) Disconnect the connector and measure the voltage on the wire harness side.

Skid Control ECU
(harness side connector):



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HINT:
Voltage can not be measured with the connector connected to the skid control ECU as the connector is water resistance.

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
+BS (2) - GND1 (1)	R - W-B	Solenoid valve power supply	Always	10 to 14 V
STP (14) - GND1 (1)	G-W - W-B	Stop light switch input	Stop light switch ON	10 to 14 V
WA (17) - GND1 (1)	W-R - W-B	ABS warning light output	IG switch ON, ABS warning light ON	4 V or more
PKB (23) - GND1 (1)	R-W - W-B	Parking brake switch input	IG switch ON, parking brake switch ON	Below 2.0 V
PKB (23) - GND1 (1)	R-W - W-B	Parking brake switch input	IG switch ON, parking brake switch OFF	8 to 14 V
+BM (31) - GND2 (32)	L - W-B	Motor relay power supply	Always	10 to 14 V
BRL (43) - GND1 (1)	R - W-B	BRAKE warning light output	IG switch ON, BRAKE warning light ON	4 V or more
IG1 (46) - GND1 (1)	B-W - W-B	ECU power supply	IG switch ON	10 to 14 V