TERMINALS OF ECU

HINT:

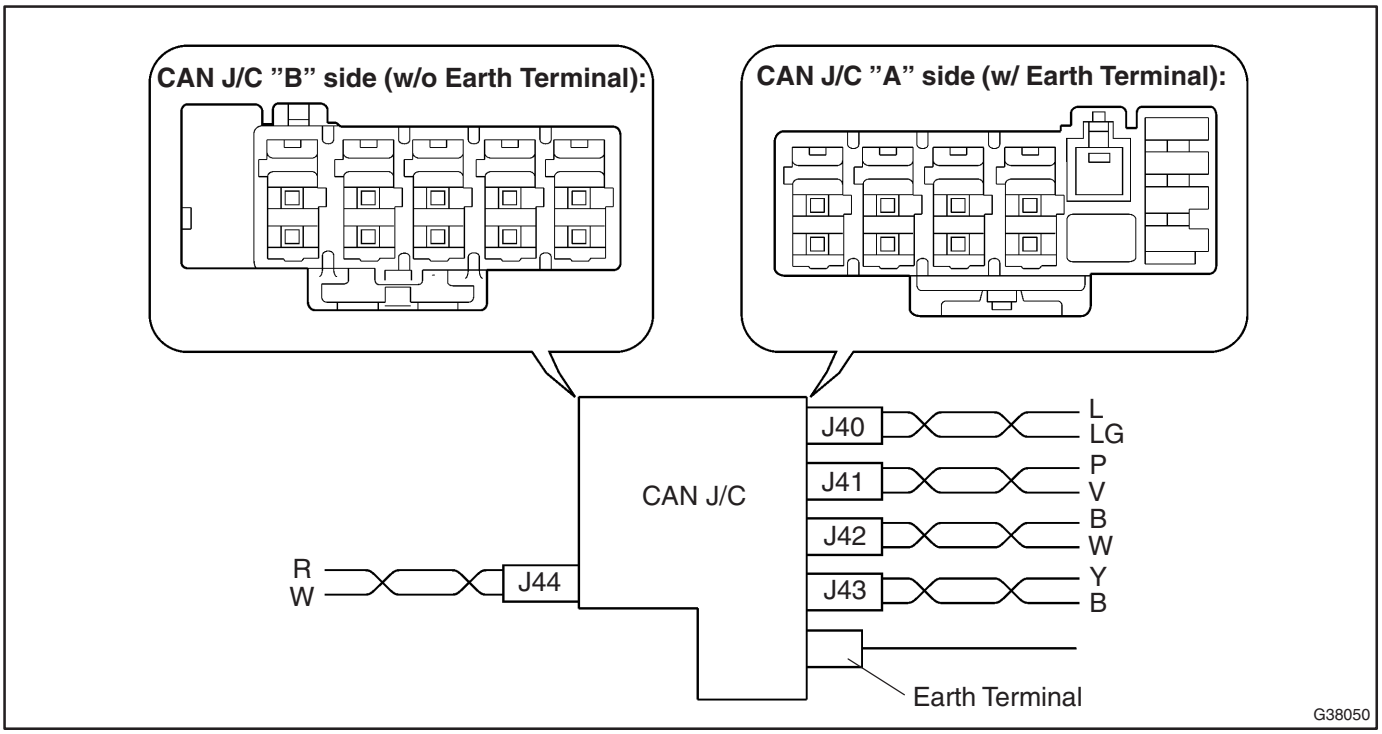
This section describes the standard CAN values for all CAN related components.

1. CAN J/C

(a) CAN J/C connectors.

HINT:

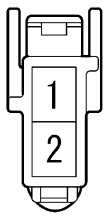
- The connectors connected to the CAN J/C can be distinguished by the colors of the bus lines and the connecting side of the connector.
- J40, J41, J42 and J43 are interchangeable.



CAN J/C connectors ("A" side, w/ earth terminal)	Color (CAN–H Side)	Color (CAN–L Side)
ECM (J40)	L	LG
DLC3 (J41)	P	V
Skid control ECU (J42)	B	W
Steering angle sensor (J43)	Y	B

CAN J/C connectors ("B" side, w/o earth terminal)	Color (CAN–H Side)	Color (CAN–L Side)
Yaw rate sensor (J44)	R	W

CAN J/C Connector Front View:

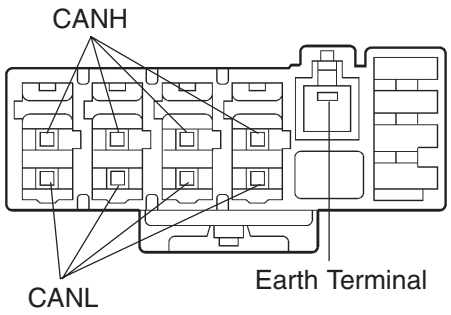


G25692 G26205

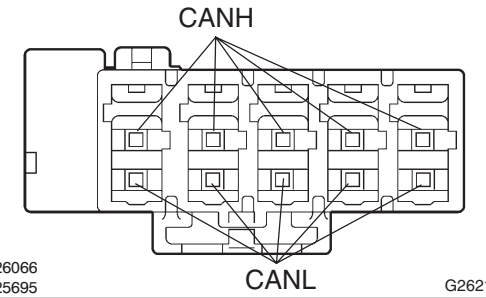
(b) The terminals of the CAN J/C connectors.

Terminal	Terminal symbol
1	CANH
2	CANL

CAN J/C "A" Side (w/ Earth Terminal):



CAN J/C "B" Side (w/o Earth Terminal):



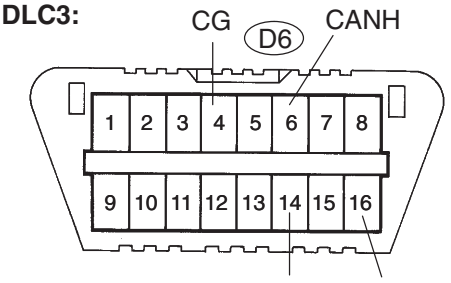
G26066
G25695
G26214

(c) Measure the resistance according to the value(s) in the table below.

Standard:

Terminals	Specified value
CANH – CANL	108 to 132 Ω

DLC3:



G25474
C81825
G26206

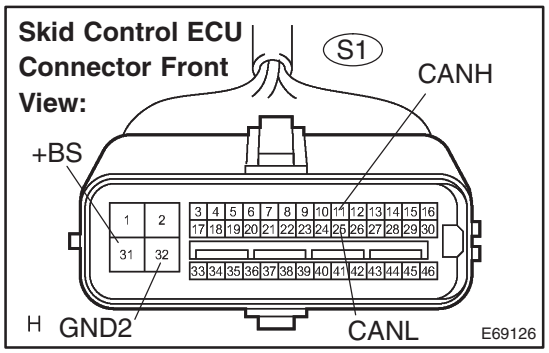
2. DLC3

(a) Check the DLC3.

(1) Measure the resistance according to the value(s) in the table below.

Standard:

Terminals	Terminal Description	Condition	Specified Value
D6–6 (CANH) – D6–14 (CANL)	HIGH–level CAN bus line – LOW–level CAN bus line	• IG switch OFF • Stop light switch OFF	54 to 69 Ω
D6–6 (CANH) – D6–16 (BAT)	HIGH–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher
D6–14 (CANL) – D6–16 (BAT)	LOW–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher
D6–6 (CANH) – D6–4 (CG)	HIGH–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
D6–14 (CANL) – D6–4 (CG)	LOW–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher

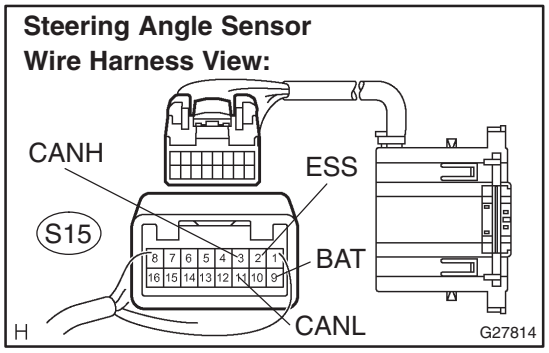


3. SKID CONTROL ECU

(a) Check the skid control ECU harness side connector (S1).
  (1) Disconnect the connector (S1) from the skid control ECU.
  (2) Measure the resistance according to the value(s) in the table below.

Standard:

Terminals	Wiring Color	Terminal Description	Condition	Specified Value
S1–11 (CANH) – S1–25 (CANL)	B – W	HIGH–level CAN bus line – LOW–level CAN bus line	• IG switch OFF • Stop light switch OFF	54 to 69 Ω
S1–11 (CANH) – S1–32 (GND2)	B – W–B	HIGH–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
S1–25 (CANL) – S1–32 (GND2)	W – W–B	LOW–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
S1–11 (CANH) – S1–31 (+BS)	B – Y	HIGH–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher
S1–25 (CANL) – S1–31 (+BS)	W – Y	LOW–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher

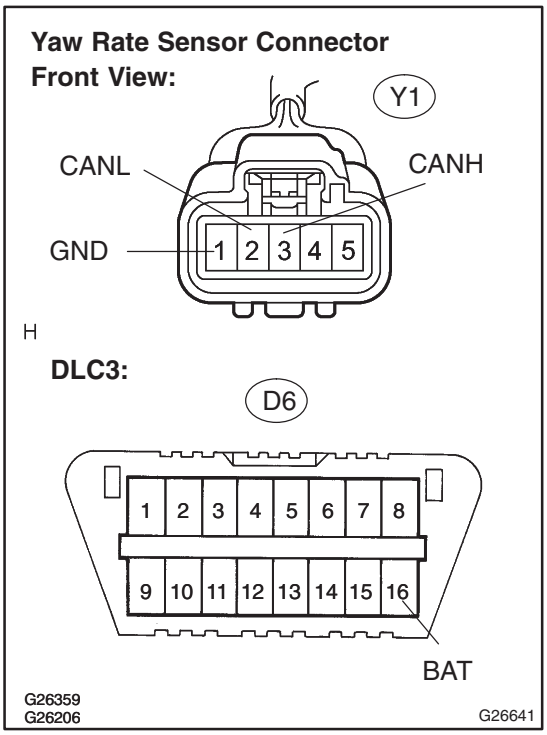


4. STEERING ANGLE SENSOR

(a) Check the harness side connector (S15) of the steering angle sensor.
  (1) Disconnect the connector (S15) from the steering angle sensor.
  (2) Measure the resistance according to the value(s) in the table below.

Standard:

Terminals	Wiring Color	Terminal Description	Condition	Specified Value
S15–3 (CANH) – S15–11 (CANL)	Y – B	HIGH–level CAN bus line – LOW–level CAN bus line	• IG switch OFF • Stop light switch OFF	54 to 69 Ω
S15–3 (CANH) – S15–2 (ESS)	Y – W–B	HIGH–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
S15–11 (CANL) – S15–2 (ESS)	B – W–B	LOW–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
S15–3 (CANH) – S15–9 (BAT)	Y – W–R	HIGH–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher
S15–11 (CANL) – S15–9 (BAT)	W – W–R	LOW–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher



5. YAW RATE SENSOR

(a) Check the yaw rate sensor harness side connector (Y1).

(1) Disconnect the connector (Y1) from the yaw rate sensor.

(2) Measure the resistance according to the value(s) in the table below.

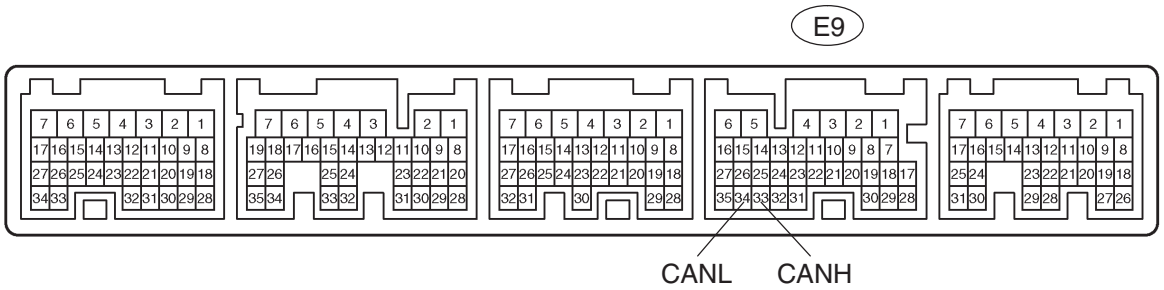
Standard:

Terminals	Wiring Color	Terminal Description	Condition	Specified Value
Y1–3 (CANH) – Y1–2 (CANL)	R – W	HIGH–level CAN bus line – LOW–level CAN bus line	• IG switch OFF • Stop light switch OFF	54 to 69 Ω
Y1–3 (CANH) – Y1–1 (GND)	R – W–B	HIGH–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
Y1–2 (CANL) – Y1–1 (GND)	W – W–B	LOW–level CAN bus line – Ground	• IG switch OFF • Stop light switch OFF	3 kΩ or higher
Y1–3 (CANH) – D6–16 (BAT)	R – O	HIGH–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher
Y1–2 (CANL) – D6–16 (BAT)	W – O	LOW–level CAN bus line – Battery positive	• IG switch OFF • Stop light switch OFF	1 MΩ or higher

6. ECM (1GR–FE)

(a) Measure the resistance according to the value(s) in the table below.

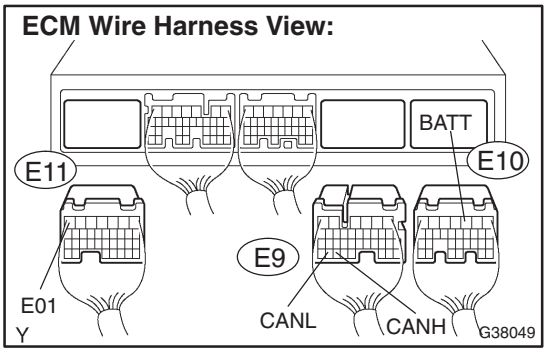
ECM:



Standard:

Terminal	Condition	Specified value
E9–33 (CANH) – E9–34 (CANL)	• IG switch OFF • Stop light switch OFF	108 to 132 Ω

ECM Wire Harness View:



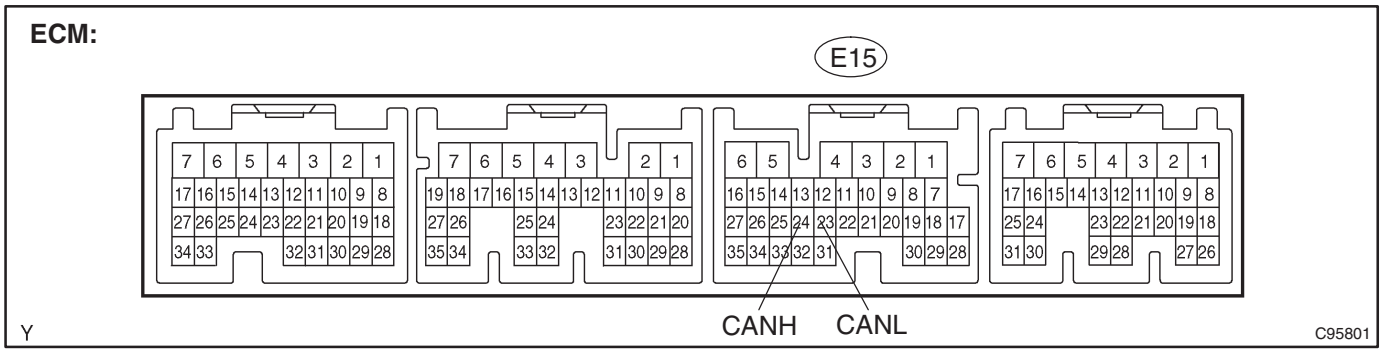
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Terminals	Wiring Color	Condition	Specified Value
E9–33 (CANH) – E9–34 (CANL)	L – LG	• IG switch OFF • Stop light switch OFF	108 to 132 Ω
E9–33 (CANH) – E11–7 (E01)	L – W–B	• IG switch OFF • Stop light switch OFF	3 kΩ or more
E9–34 (CANL) – E11–7 (E01)	LG – W–B	• IG switch OFF • Stop light switch OFF	3 kΩ or more
E9–33 (CANH) – E10–3 (BATT)	L – L	• IG switch OFF • Stop light switch OFF	1 MΩ or more
E9–34 (CANL) – E10–3 (BATT)	LG – L	• IG switch OFF • Stop light switch OFF	1 MΩ or more

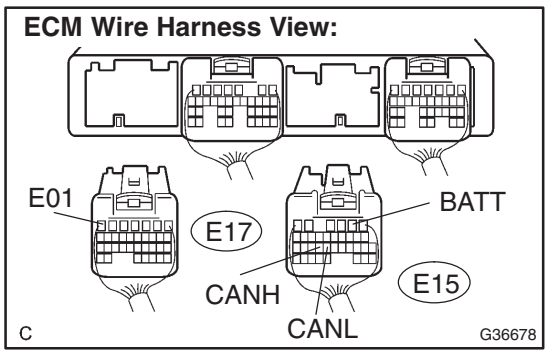
7. ECM (1KD–FTV)

(a) Measure the resistance according to the value(s) in the table below.



Standard:

Terminal	Condition	Specified value
E15–24 (CANH) – E15–23 (CANL)	• IG switch OFF • Stop light switch OFF	108 to 132 Ω



(b) Measure the resistance according to the value(s) in the table below.

Standard:

Terminals	Wiring Color	Condition	Specified Value
E15–24 (CANH) – E15–23 (CANL)	L – LG	• IG switch OFF • Stop light switch OFF	108 to 132 Ω
E15–24 (CANH) – E17–7 (E01)	L – W–B	• IG switch OFF • Stop light switch OFF	3 kΩ or more
E15–23 (CANL) – E17–7 (E01)	LG – W–B	• IG switch OFF • Stop light switch OFF	3 kΩ or more
E15–24 (CANH) – E15–2 (BATT)	L – L	• IG switch OFF • Stop light switch OFF	1 MΩ or more
E15–23 (CANL) – E15–2 (BATT)	LG – L	• IG switch OFF • Stop light switch OFF	1 MΩ or more