#### CAN COMMUNICATION SYSTEM > TERMINALS OF ECU

## for Preparation Click here

#### HINT:

Operating the engine switch, any switches or any doors triggers related ECU and sensor communication with the CAN, which causes resistance variation.

#### **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

**a.** Disconnect the cable from the negative (-) battery terminal before measuring the resistances of the main wire and the branch wire.

#### **CAUTION:**

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system (Click here).

#### **NOTICE:**

- Before measuring the resistance, leave the vehicle for at least 1 minute and do not operate the engine switch, any switches or any doors. If doors need to be opened in order to check connectors, open the doors and leave them open.
- w/ Navigation System (for HDD):
   After the engine switch is turned off, the display and navigation module display (HDD navigation system) records various types of memory and settings. As a result, after turning the engine switch off, be sure to wait for the time specified in the following table before disconnecting the cable from the negative (-) battery terminal.

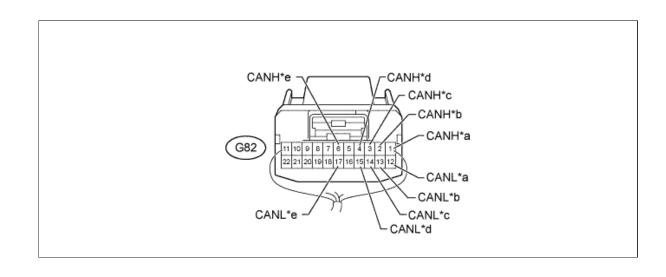
#### Waiting Time before Disconnecting Cable from Negative (-) Battery Terminal:

Condition	Waiting Time
Vehicle enrolled in G-BOOK system	6 minutes
Vehicle not enrolled in G-BOOK system	1 minute

• When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

#### JUNCTION CONNECTOR

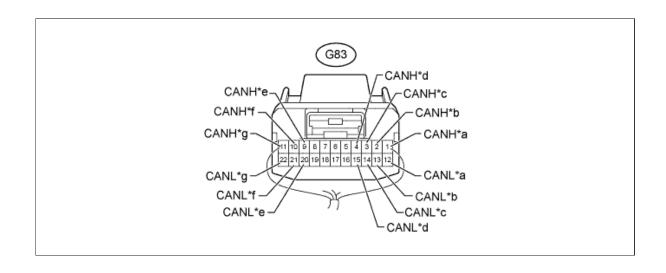
a. NO. 1 JUNCTION CONNECTOR



*a	for No. 2 Junction Connector	*b	for Four Wheel Drive Control ECU
*c	for Certification ECU	*d	for Power Management Control ECU (V1 Bus)
*e	for ECM (V1 Bus)	-	-

No. 1 Junction Connector	Wiring Color	Connect to
G82-1 (CANH)	GR	No. 2 junction connector
G82-12 (CANL)	W	No. 2 junction connector
G82-2 (CANH)	G	Four wheel drive control
G82-13 (CANL)	W	ECU
G82-3 (CANH)	Р	Certification ECU
G82-14 (CANL)	W	
G82-4 (CANH)	BR	Power management
G82-15 (CANL)	W	control ECU (V1 bus)
G82-6 (CANH)	R	ECM (V1 bus)
G82-17 (CANL)	W	

# ii. G83 No. 1 junction connector



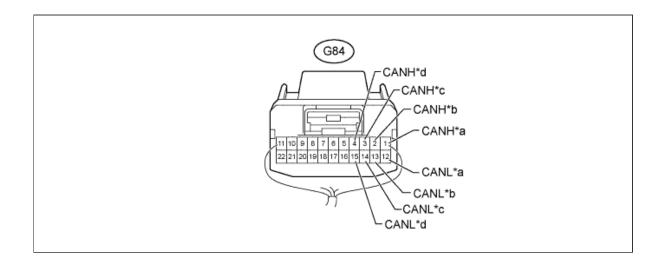
*a	for No. 3 Junction Connector (V2 Bus)	*b	for Power Management Control ECU (V2 Bus)
*c	for Parking Assist ECU (w/ LEXUS Parking Assist-sensor System [w/ Parking Assist System and/or Side Monitor System]) for Clearance Warning ECU Assembly (w/ LEXUS Parking Assist-sensor System [w/o Parking Assist System and/or Side Monitor System])	*d	for Driving Support ECU Assembly (w/ Pre-crash Safety System) (V2 Bus)
*e	for ECM (Power Management Bus)	*f	for Air Conditioning Amplifier Assembly
*g	for Power Management Control ECU (Power Management Bus)	-	-

No. 1 Junction Connector	Wiring Color	Connect to
G83-1 (CANH)	Р	No. 3 junction connector
G83-12 (CANL)	W	(V2 bus)
G83-2 (CANH)	V	Power management
G83-13 (CANL)	W	control ECU (V2 bus)
G83-3 (CANH)	В	Parking assist ECU*1 or clearance warning ECU
G83-14 (CANL)	W	assembly*2
G83-4 (CANH)	G	Driving support ECU
G83-15 (CANL)	W	assembly*3 (V2 bus)
G83-9 (CANH)	BR	ECM (power
G83-20 (CANL)	GR	management bus)
G83-10 (CANH)	BR	Air conditioning amplifier assembly
G83-21 (CANL)	Υ	
G83-11 (CANH)	BR	Power management control ECU (power
G83-22 (CANL)	W	

	management bus) (V2
	Bus)

<sup>\*1:</sup> w/ LEXUS Parking Assist-sensor System (w/ Parking Assist System and/or Side Monitor System)

## iii. G84 No. 1 junction connector



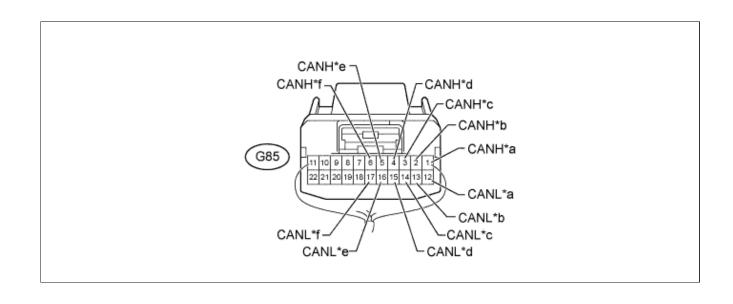
### **Text in Illustration**

*a	for Outer Mirror Control ECU Assembly RH	*b	for Driving Support Switch Control ECU
*c	for No. 6 Junction Connector	*d	for No. 3 Junction Connector (MS Bus)

No. 1 Junction Connector	Wiring Color	Connect to
G84-1 (CANH)	G	Outer mirror control ECU
G84-12 (CANL)	W	assembly RH
G84-2 (CANH)	R	Driving support switch control ECU
G84-13 (CANL)	W	
G84-3 (CANH)	LG	No. 6 junction connector
G84-14 (CANL)	W	
G84-4 (CANH)	V	No. 3 junction connector (MS bus)
G84-15 (CANL)	W	

<sup>\*2:</sup> w/ LEXUS Parking Assist-sensor System (w/o Parking Assist System and/or Side Monitor System)

<sup>\*3:</sup> w/ Pre-crash Safety System

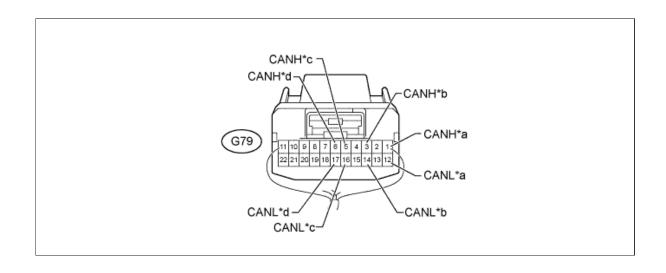


*a	for No. 1 Junction Connector (V1 Bus)	*b	for Display and Navigation Module Display (w/ Navigation System)
*c	for Spiral with Sensor Cable Sub- assembly	*d	for Yaw Rate Sensor Assembly
*e	for Center Airbag Sensor Assembly	*f	for No. 3 Junction Connector (V1 Bus)

No. 2 Junction Connector	Wiring Color	Connect to
G85-1 (CANH)	GR	No. 1 junction connector (V1
G85-12 (CANL)	W	bus)
G85-2 (CANH)	Р	Display and navigation
G85-13 (CANL)	W	module display*
G85-3 (CANH)	G	Spiral with sensor cable sub-
G85-14 (CANL)	W	assembly
G85-4 (CANH)	R	Yaw rate sensor assembly
G85-15 (CANL)	W	Taw rate sensor assembly
G85-5 (CANH)	Υ	Center airbag sensor assembly
G85-16 (CANL)	W	
G85-6 (CANH)	LG	No. 3 junction connector (V1 bus)
G85-17 (CANL)	W	
Y/ No. in the Contract		

<sup>\*:</sup> w/ Navigation System

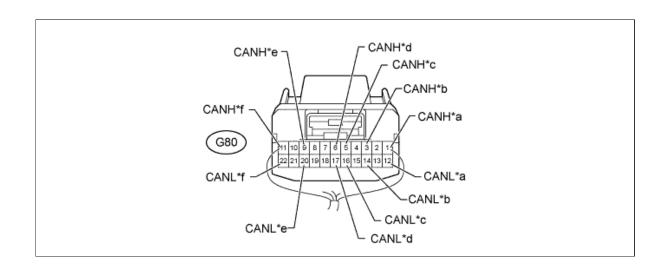
# c. NO. 3 JUNCTION CONNECTOR



*a	for No. 2 Junction Connector	*b	for Main Body ECU (Multiplex Network Body ECU) (V1 Bus)
*c	for DLC3	*d	for No. 4 Junction Connector (V1 Bus)

No. 3 Junction Connector	Wiring Color	Connect to
G79-1 (CANH)	LG	No. 2 junction connector
G79-12 (CANL)	W	No. 2 junction connector
G79-3 (CANH)	L	Main body ECU
G79-14 (CANL)	W	(multiplex network body ECU) (V1 bus)
G79-5 (CANH)	R	DLC3
G79-16 (CANL)	W	
G79-6 (CANH)	В	No. 4 junction connector (V1 Bus)
G79-17 (CANL)	W	

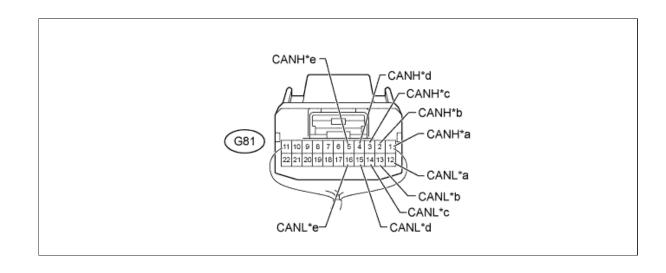
ii. G80 No. 3 junction connector



*a	for No. 1 Junction Connector (V2 Bus)	*b	for No. 4 Junction Connector (V2 Bus)	
*c	for Stabilizer Control ECU	*d	for Seat Belt Control ECU (w/ Pre-crash Safety System)	
*e	for Driving Support ECU Assembly (w/ Pre-crash Safety System) (Sensor Bus)	*f	for Millimeter Wave Radar Sensor Assembly (w/ Pre- crash Safety System)	

No. 3 Junction Connector	Wiring Color	Connect to	
G80-1 (CANH)	Р	No. 1 junction connector	
G80-12 (CANL)	W	(V2 bus)	
G80-3 (CANH)	В	No. 4 junction connector	
G80-14 (CANL)	W	(V2 Bus)	
G80-5 (CANH)	V	Stabilizer control ECU	
G80-16 (CANL)	W		
G80-6 (CANH)	L	Cook bolk control FOUX	
G80-17 (CANL)	W	Seat belt control ECU*	
G80-9 (CANH)	L	Driving support ECU assembly (sensor bus)*	
G80-20 (CANL)	W		
G80-11 (CANH)	LG	Millimeter wave radar sensor assembly*	
G80-22 (CANL)	W		

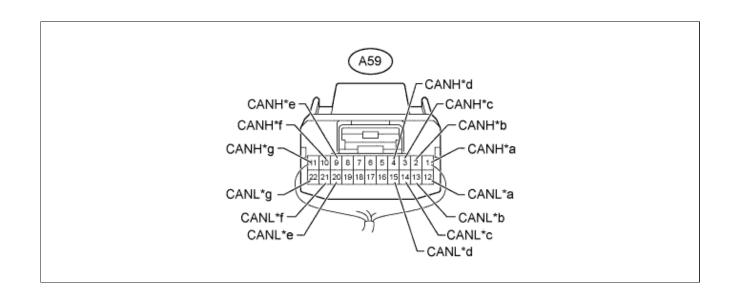
<sup>\*:</sup> w/ Pre-crash Safety System



*a	for Outer Mirror Control ECU Assembly LH	*b	for Front Power Seat Switch LH
*c	for Multiplex Tilt and Telescopic ECU	*d	for Main Body ECU (Multiplex Network Body ECU) (MS Bus)
*e	for No. 1 Junction Connector (MS Bus)	-	-

No. 3 Junction Connector	Wiring Color	Connect to	
G81-1 (CANH)	В	Outer mirror control ECU	
G81-12 (CANL)	W	assembly LH	
G81-2 (CANH)	L	Front power seat switch LH	
G81-13 (CANL)	W		
G81-3 (CANH)	GR	Multiplex tilt and telescopic ECU	
G81-14 (CANL)	W		
G81-4 (CANH)	Р	Main body ECU (multiplex network body ECU) (MS bus)	
G81-15 (CANL)	W		
G81-5 (CANH)	V	No. 1 junction connector (MS bus)	
G81-16 (CANL)	W		

# d. NO. 4 JUNCTION CONNECTOR



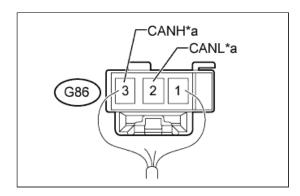
*a	for No. 5 Junction Connector	*b	for No. 3 Junction Connector (V2 Bus)
*c	for Suspension Control ECU	*d	for Headlight Swivel ECU Assembly (AFS ECU)
*e	for No. 3 Junction Connector (V1 Bus)	*f	for Combination Meter Assembly
*g	for Master Cylinder Solenoid (Skid Control ECU)	-	-

No. 4 Junction Connector	Wiring Color	Connect to	
A59-1 (CANH)	LG	No. E jungtion connector	
A59-12 (CANL)	W	No. 5 junction connector	
A59-2 (CANH)	В	No. 3 junction connector (V2	
A59-13 (CANL)	W	bus)	
A59-3 (CANH)	GR	Suspension control ECII	
A59-14 (CANL)	W	Suspension control ECU	
A59-4 (CANH)	V	Headlight swivel ECU	
A59-15 (CANL)	W	assembly (AFS ECU)	
A59-9 (CANH)	R	No. 3 junction connector (V1	
A59-20 (CANL)	W	bus)	
A59-10 (CANH)	LG	Combination meter assembly	
A59-21 (CANL)	W		
A59-11 (CANH)	В	Master cylinder solenoid (skid control ECU)	
A59-22 (CANL)	W		

# e. NO. 5 JUNCTION CONNECTOR

# **Text in Illustration**

\*a for No. 4 Junction Connector (V2 Bus)

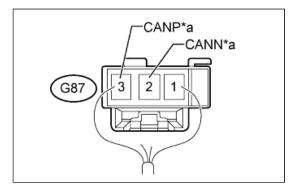


No. 5 Junction Connector	Wiring Color	Connect to
G86-2 (CANL)	W	No. 4 junction connector (V2
G86-3 (CANH)	LG	bus)

#### f. NO. 6 JUNCTION CONNECTOR

#### **Text in Illustration**

	*-	for No. 1 Junction Connector (MS Bus)
l	"a	Bus)



No. 6 Junction Connector	Wiring Color	Connect to
G87-2 (CANN)	W	No. 1 junction connector (MS
G87-3 (CANP)	LG	bus)

#### **CHECK DLC3**

**a.** Disconnect the cable from the negative (-) battery terminal before measuring the resistances of the main wire and the branch wire.

#### **CAUTION:**

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

#### **NOTICE:**

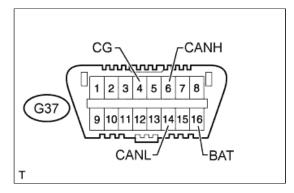
w/ Navigation System (for HDD):
 After the engine switch is turned off, the display and navigation module display (HDD navigation system) records various types of memory and settings. As a result, after turning the engine switch off, be sure to wait for the time specified in the following table before disconnecting the cable from the negative (-) battery terminal.

#### Waiting Time before Disconnecting Cable from Negative (-) Battery Terminal:

Condition	Waiting Time
Contactor	waiting initio

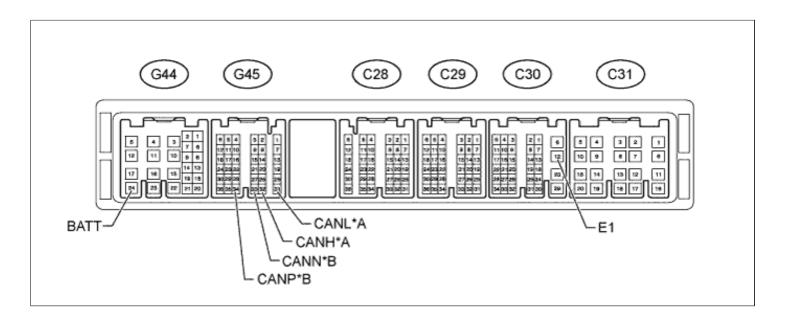
Vehicle enrolled in G-BOOK system	6 minutes
Vehicle not enrolled in G-BOOK system	1 minute

- When disconnecting the cable, some systems need to be initialized after the cable is reconnected (<u>Click here</u>).
- **b.** Measure the resistance according to the value(s) in the table below.



Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G37-6 (CANH) - G37- 14 (CANL)		Engine switch off	54 to 69 Ω
G37-6 (CANH) - G37- 4 (CG)	R - W-B	Engine switch off	200 Ω or higher
G37-14 (CANL) - G37-4 (CG)	W - W-B	Engine switch off	200 Ω or higher
G37-6 (CANH) - G37- 16 (BAT)	R - GR	Engine switch off	6 kΩ or higher
G37-14 (CANL) - G37-16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

## **CHECK ECM**



*A	for V1 Bus	*B	for Power Management Bus
	1.0 = = 0.0		· · · · · · · · · · · · · · · · · · ·

- a. Disconnect the C30, G44 and G45 ECM connectors.
- **b.** Measure the resistance according to the value(s) in the table below.

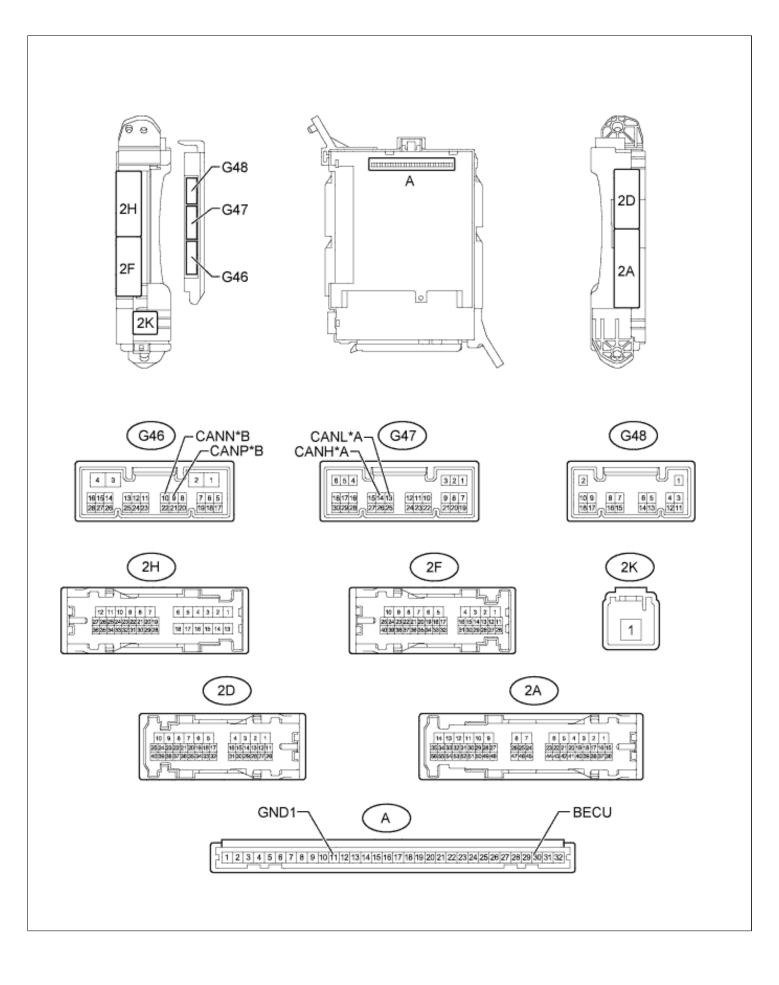
### for V1 Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G45-32 (CANH) - G45-31 (CANL)	R - W	Engine switch off	108 to 132 Ω
G45-32 (CANH) - C30-12 (E1)	R - BR	Engine switch off	$200~\Omega$ or higher
G45-31 (CANL) - C30-12 (E1)	W - BR	Engine switch off	$200~\Omega$ or higher
G45-32 (CANH) - G44-24 (BATT)	R - L	Engine switch off	6 kΩ or higher
G45-31 (CANL) - G44-24 (BATT)	W - L	Engine switch off	6 kΩ or higher

### for Power Management Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G45-34 (CANP) - G45-33 (CANN)	BR - GR	Engine switch off	108 to 132 Ω
G45-34 (CANP) - C30-12 (E1)	BR - BR	Engine switch off	$200~\Omega$ or higher
G45-33 (CANN) - C30-12 (E1)	GR - BR	Engine switch off	$200~\Omega$ or higher
G45-34 (CANP) - G44-24 (BATT)	BR - L	Engine switch off	6 kΩ or higher
G45-33 (CANN) - G44-24 (BATT)	GR - L	Engine switch off	6 kΩ or higher

CHECK DRIVER SIDE JUNCTION BLOCK ASSEMBLY AND MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)



		a.		
ı	* <b>^</b>	for V1 Bus	*R	for MS Bus
1	~	for V1 Bus	ט ן	כמם כויו וטון

- a. Remove the main body ECU (multiplex network body ECU) (Click here).
- **b.** Measure the resistance according to the value(s) in the table below.

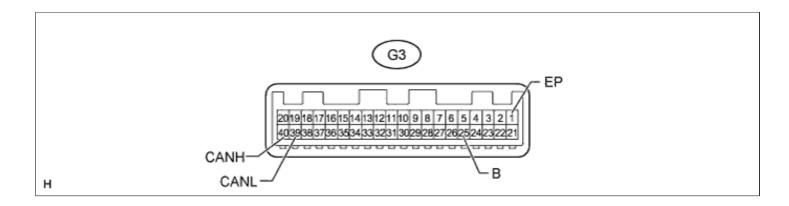
### for V1 Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G47-14 (CANH) - G47-13 (CANL)	L - W	Engine switch off	54 to 69 Ω
G47-14 (CANH) - A- 11 (GND1)	L - None	Engine switch off	200 $\Omega$ or higher
G47-13 (CANL) - A- 11 (GND1)	W - None	Engine switch off	200 $\Omega$ or higher
G47-14 (CANH) - A- 30 (BECU)	L - None	Engine switch off	6 kΩ or higher
G47-13 (CANL) - A- 30 (BECU)	W - None	Engine switch off	6 kΩ or higher

### for MS Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G46-9 (CANP) - G46- 10 (CANN)	P - W	Engine switch off	108 to 132 Ω
G46-9 (CANP) - A-11 (GND1)	P - None	Engine switch off	200 Ω or higher
G46-10 (CANN) - A- 11 (GND1)	W - None	Engine switch off	200 $\Omega$ or higher
G46-9 (CANP) - A-30 (BECU)	P - None	Engine switch off	6 kΩ or higher
G46-10 (CANN) - A- 30 (BECU)	W - None	Engine switch off	6 kΩ or higher

#### **CHECK COMBINATION METER ASSEMBLY**

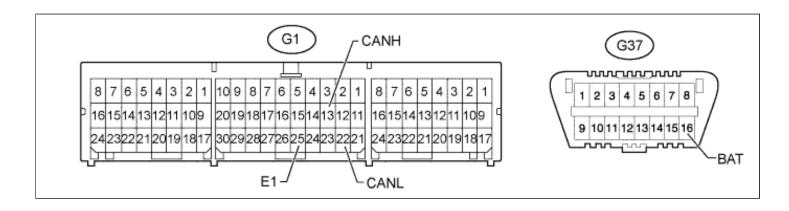


**a.** Disconnect the G3 combination meter assembly connector.

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

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G3-40 (CANH) - G3- 39 (CANL)	LG - W	Engine switch off	108 to 132 Ω
G3-40 (CANH) - G3-1 (EP)	LG - W-B	Engine switch off	200 Ω or higher
G3-39 (CANL) - G3-1 (EP)	W - W-B	Engine switch off	200 Ω or higher
G3-40 (CANH) - G3- 25 (B)	LG - L	Engine switch off	6 kΩ or higher
G3-39 (CANL) - G3- 25 (B)	W - L	Engine switch off	6 kΩ or higher

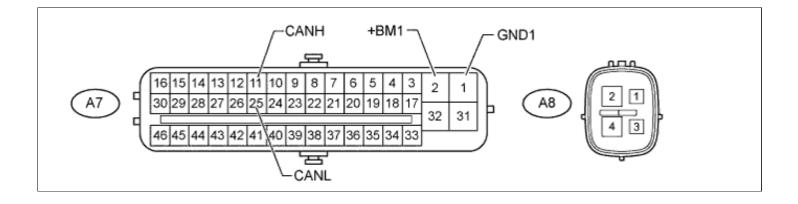
### **CHECK CENTER AIRBAG SENSOR ASSEMBLY**



- **a.** Disconnect the G1 center airbag sensor assembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G1-13 (CANH) - G1- 22 (CANL)	Y - W	Engine switch off	54 to 69 Ω
G1-13 (CANH) - G1- 25 (E1)	Y - W-B	Engine switch off	200 Ω or higher
G1-22 (CANL) - G1- 25 (E1)	W - W-B	Engine switch off	200 Ω or higher
G1-13 (CANH) - G37- 16 (BAT)		Engine switch off	6 kΩ or higher
G1-22 (CANL) - G37- 16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

# **CHECK MASTER CYLINDER SOLENOID (SKID CONTROL ECU)**

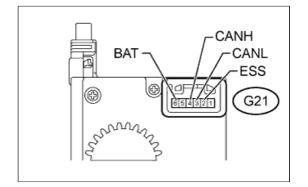


- a. Disconnect the A7 master cylinder solenoid (skid control ECU) connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
A7-11 (CANH) - A7- 25 (CANL)	B - W	Engine switch off	54 to 69 Ω
A7-11 (CANH) - A7-1 (GND1)	B - W-B	Engine switch off	200 Ω or higher
(GND1)	VV - VV-D	Engine switch off	200 Ω or higher
A7-11 (CANH) - A7-2 (+BM1)	B - B	Engine switch off	6 kΩ or higher
A7-25 (CANL) - A7-2 (+BM1)	W - B	Engine switch off	6 kΩ or higher

#### **CHECK SPIRAL WITH SENSOR CABLE SUB-ASSEMBLY**

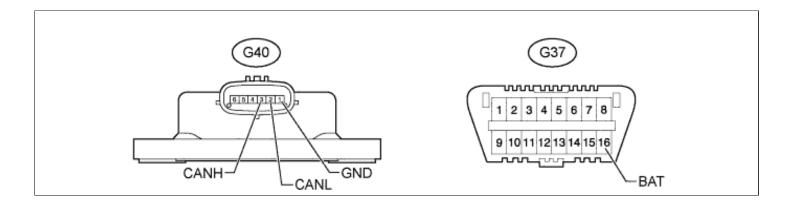
- **a.** Disconnect the G21 spiral with sensor cable subassembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.



Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G21-4 (CANH) - G21- 3 (CANL)	G - W	Engine switch off	54 to 69 Ω
G21-4 (CANH) - G21- 2 (ESS)	G - W-B	Engine switch off	200 Ω or higher
G21-3 (CANL) - G21- 2 (ESS)	W - W-B	Engine switch off	200 Ω or higher
G21-4 (CANH) - G21-	G - L	Engine switch off	6 kΩ or higher

6 (BAT)				ı
G21-3 (CANL) - G21- 6 (BAT)	W - L	Engine switch off	6 kΩ or higher	

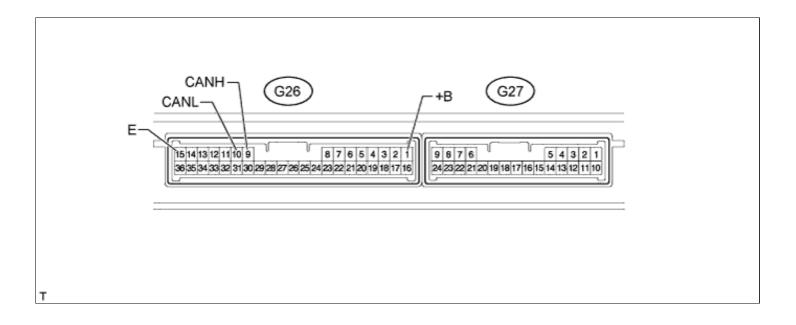
### **CHECK YAW RATE SENSOR ASSEMBLY**



- **a.** Disconnect the G40 yaw rate sensor assembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G40-3 (CANH) - G40- 2 (CANL)	R - W	Engine switch off	54 to 69 Ω
G40-3 (CANH) - G40- 1 (GND)		Engine switch off	$200~\Omega$ or higher
G40-2 (CANL) - G40- 1 (GND)		Engine switch off	$200~\Omega$ or higher
G40-3 (CANH) - G37- 16 (BAT)		Engine switch off	6 kΩ or higher
G40-2 (CANL) - G37- 16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

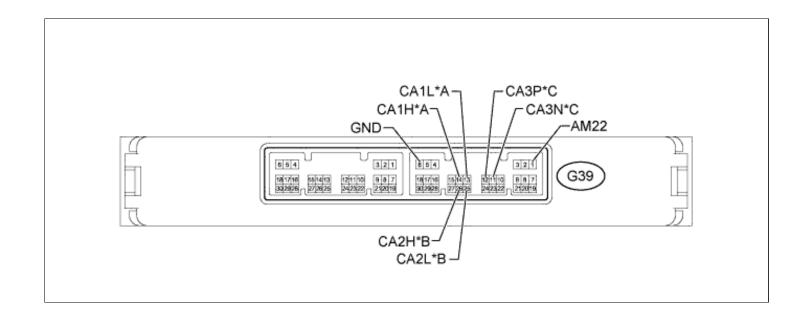
# **CHECK CERTIFICATION ECU**



- a. Disconnect the G26 certification ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G26-9 (CANH) - G26- 10 (CANL)		Engine switch off	54 to 69 Ω
G26-9 (CANH) - G26- 15 (E)	P - W-B	Engine switch off	200 Ω or higher
G26-10 (CANL) - G26-15 (E)	W - W-B	Engine switch off	200 Ω or higher
G26-9 (CANH) - G26- 1 (+B)	P - V	Engine switch off	6 kΩ or higher
G26-10 (CANL) - G26-1 (+B)	W - V	Engine switch off	6 kΩ or higher

**CHECK POWER MANAGEMENT CONTROL ECU** 



*A	for V1 Bus	*B	for V2 Bus
*C	for Power Management Bus	-	-

- **a.** Disconnect the G39 power management control ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

### for V1 Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G39-14 (CA1H) - G39-13 (CA1L)	BR - W	Engine switch off	54 to 69 Ω
G39-14 (CA1H) - G39-6 (GND)	BR - W-B	Engine switch off	200 Ω or higher
G39-13 (CA1L) - G39-6 (GND)	W - W-B	Engine switch off	200 Ω or higher
G39-14 (CA1H) - G39-1 (AM22)	BR - B	Engine switch off	6 kΩ or higher
G39-13 (CA1L) - G39-1 (AM22)	W - B	Engine switch off	6 kΩ or higher

### for V2 Bus

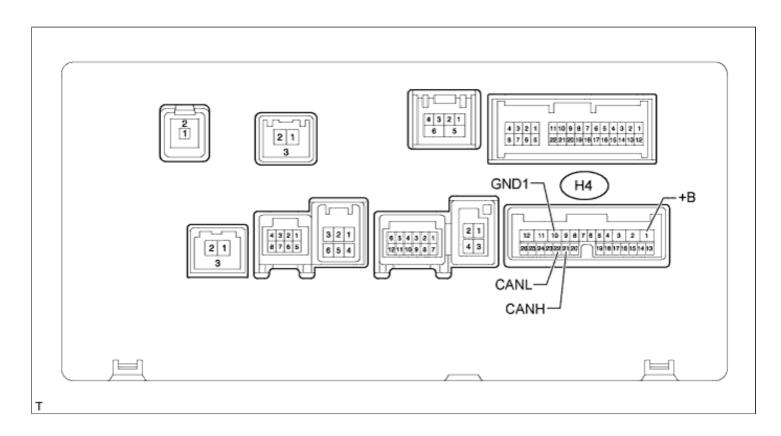
Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G39-26 (CA2H) - G39-25 (CA2L)	V - W	Engine switch off	108 to 132 Ω
G39-26 (CA2H) - G39-6 (GND)	V - W-B	Engine switch off	200 $\Omega$ or higher
G39-25 (CA2L) - G39-6 (GND)	W - W-B	Engine switch off	200 $\Omega$ or higher
G39-26 (CA2H) - G39-1 (AM22)	V - B	Engine switch off	6 kΩ or higher

G39-25 (CA2	L) -  W - E	i	Engine switch off	6 kΩ or higher	
G39-1 (AM22	)				

for Power Management Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G39-12 (CA3P) - G39-11 (CA3N)	BR - W	Engine switch off	108 to 132 Ω
G39-12 (CA3P) - G39-6 (GND)	BR - W-B	Engine switch off	200 Ω or higher
G39-11 (CA3N) - G39-6 (GND)	W - W-B	Engine switch off	200 Ω or higher
G39-12 (CA3P) - G39-1 (AM22)	BR - B	Engine switch off	6 kΩ or higher
G39-11 (CA3N) - G39-1 (AM22)	W - B	Engine switch off	6 kΩ or higher

# CHECK DISPLAY AND NAVIGATION MODULE DISPLAY (w/ Navigation System)

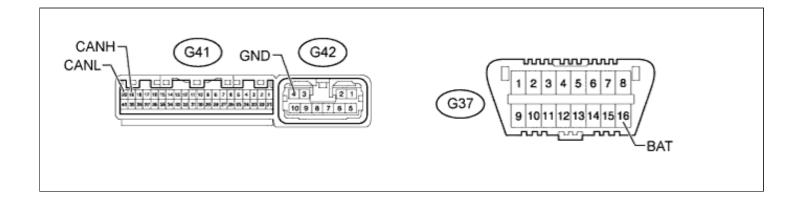


- **a.** Disconnect the H4 display and navigation module display connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
H4-21 (CANH) - H4- 22 (CANL)	W - P	Engine switch off	54 to 69 Ω
H4-21 (CANH) - H4-	W - BR	Engine switch off	200 Ω or higher

10 (GND1)			
H4-22 (CANL) - H4- 10 (GND1)	P - BR	Engine switch off	200 Ω or higher
H4-21 (CANH) - H4-1 (+B1)	W - SB	Engine switch off	6 kΩ or higher
H4-22 (CANL) - H4-1 (+B1)	P - SB	Engine switch off	6 kΩ or higher

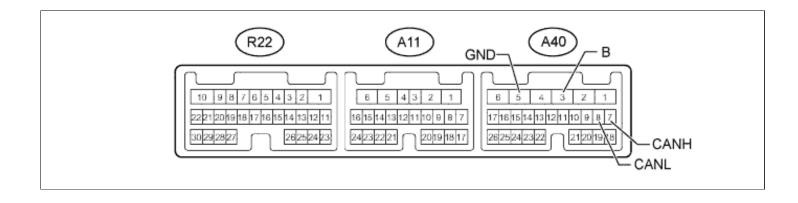
### **CHECK FOUR WHEEL DRIVE CONTROL ECU**



- a. Disconnect the G41 and G42 four wheel drive control ECU connectors.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G41-19 (CANH) - G41-20 (CANL)	G - W	Engine switch off	54 to 69 Ω
G41-19 (CANH) - G42-4 (GND)	G - W-B	Engine switch off	200 Ω or higher
G41-20 (CANL) - G42-4 (GND)	W - W-B	Engine switch off	200 Ω or higher
G41-19 (CANH) - G37-16 (BAT)	G - GR	Engine switch off	6 kΩ or higher
G41-20 (CANL) - G37-16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

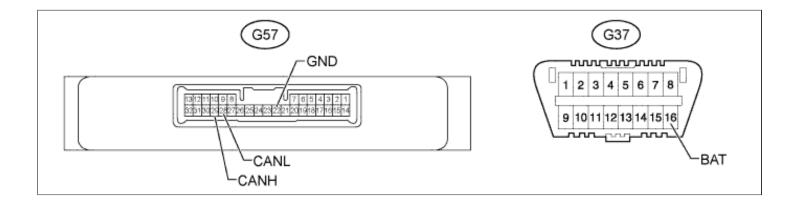
## **CHECK SUSPENSION CONTROL ECU**



- a. Disconnect the A40 suspension control ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
A40-7 (CANH) - A40- 8 (CANL)	GR - W	Engine switch off	54 to 69 Ω
A40-7 (CANH) - A40- 5 (GND)	GR - W-B	Engine switch off	200 Ω or higher
A40-8 (CANL) - A40- 5 (GND)	W - W-B	Engine switch off	200 Ω or higher
A40-7 (CANH) - A40- 3 (B)	GR - GR	Engine switch off	6 kΩ or higher
A40-8 (CANL) - A40- 3 (B)	W - GR	Engine switch off	6 kΩ or higher

#### **CHECK STABILIZER CONTROL ECU**

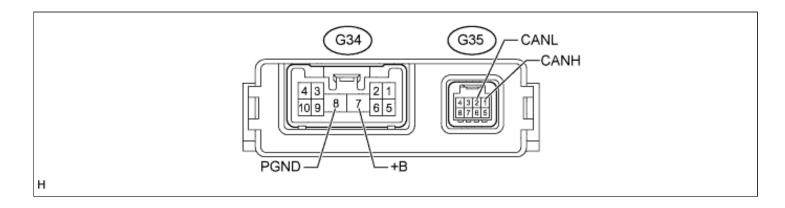


- a. Disconnect the G57 stabilizer control ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G57-29 (CANH) - G57-28 (CANL)	V - W	Engine switch off	54 to 69 Ω

G57-29 (CANH) - G57-22 (GND)	V - W-B	Engine switch off	$200~\Omega$ or higher
G57-28 (CANL) - G57-22 (GND)	W - W-B	Engine switch off	200 $\Omega$ or higher
G57-29 (CANH) - G37-16 (BAT)	V - GR	Engine switch off	6 kΩ or higher
G57-28 (CANL) - G37-16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

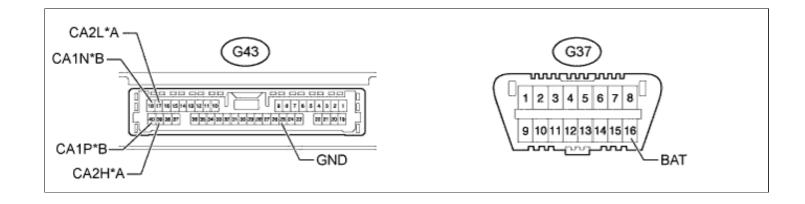
# **CHECK SEAT BELT CONTROL ECU (w/ Pre-crash Safety System)**



- a. Disconnect the G34 and G35 seat belt control ECU connectors.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G35-1 (CANH) - G35- 2 (CANL)		Engine switch off	54 to 69 Ω
G35-1 (CANH) - G34- 8 (PGND)	L - W-B	Engine switch off	200 Ω or higher
G35-2 (CANL) - G34- 8 (PGND)	W - W-B	Engine switch off	200 Ω or higher
G35-1 (CANH) - G34- 7 (+B)	L - W	Engine switch off	6 kΩ or higher
G35-2 (CANL) - G34- 7 (+B)	W - W	Engine switch off	6 kΩ or higher

# CHECK DRIVING SUPPORT ECU ASSEMBLY (w/ Pre-crash Safety System)



*A  for V2 Bus   *B  for Sensor Bus
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#### **NOTICE:**

- As disconnecting the connector to perform inspections may cause DTCs to be stored, clear DTCs after performing inspections.
- As the connector may be damaged if a load of more than 10 kg (22 lb) is applied to it, do not apply any more load than necessary to the connector.
- a. Disconnect the G43 driving support ECU assembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.

#### for V2 Bus

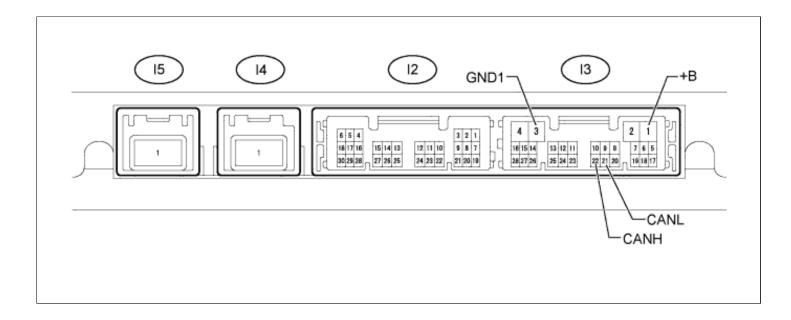
Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G43-39 (CA2H) - G43-17 (CA2L)	G - W	Engine switch off	54 to 69 Ω
G43-39 (CA2H) - G43-25 (GND)	G - BR	Engine switch off	200 Ω or higher
G43-17 (CA2L) - G43-25 (GND)	W - BR	Engine switch off	200 Ω or higher
G43-39 (CA2H) - G37-16 (BAT)	G - GR	Engine switch off	6 kΩ or higher
G43-17 (CA2L) - G37-16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

#### for Sensor Bus

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G43-40 (CA1P) - G43-18 (CA1N)	L - W	Engine switch off	108 to 132 Ω
G43-40 (CA1P) - G43-25 (GND)	L - BR	Engine switch off	200 $\Omega$ or higher
G43-18 (CA1N) - G43-25 (GND)	W - BR	Engine switch off	200 $\Omega$ or higher
G43-40 (CA1P) - G37-16 (BAT)	L - GR	Engine switch off	6 kΩ or higher

G43-18 (CA1N	N) -  W - GR	Engine switch of	f  6 kΩ or higher	
G37-16 (BAT)				

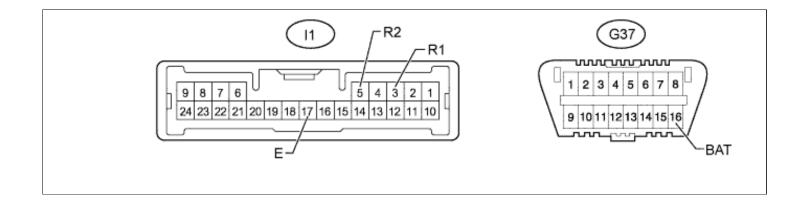
CHECK PARKING ASSIST ECU (w/ LEXUS Parking Assist-sensor System [w/ Parking Assist System and/or Side Monitor System])



- **a.** Disconnect the I3 parking assist ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
I3-22 (CANH) - I3-21 (CANL)	B - W	Engine switch off	54 to 69 Ω
I3-22 (CANH) - I3-3 (GND1)	B - W-B	Engine switch off	200 Ω or higher
I3-21 (CANL) - I3-3 (GND1)	W - W-B	Engine switch off	200 Ω or higher
I3-22 (CANH) - I3-1 (+B)	B - L	Engine switch off	6 kΩ or higher
I3-21 (CANL) - I3-1 (+B)	W - L	Engine switch off	6 kΩ or higher

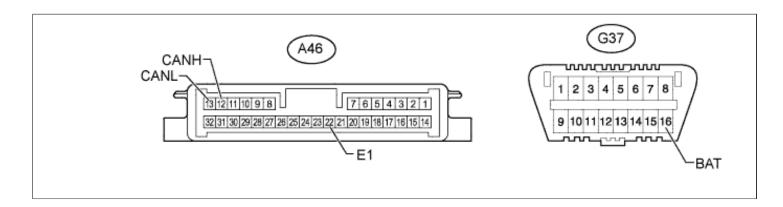
CHECK CLEARANCE WARNING ECU ASSEMBLY (w/ LEXUS Parking Assist-sensor System [w/o Parking Assist System and/or Side Monitor System])



- a. Disconnect the I1 clearance warning ECU assembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
I1-3 (R1) - I1-5 (R2)	B - W	Engine switch off	54 to 69 Ω
I1-3 (R1) - I1-17 (E)	B - W-B	Engine switch off	200 Ω or higher
I1-5 (R2) - I1-17 (E)	W - W-B	Engine switch off	200 Ω or higher
I1-3 (R1) - G37-16 (BAT)	B - GR	Engine switch off	6 kΩ or higher
I1-5 (R2) - G37-16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

# CHECK HEADLIGHT SWIVEL ECU ASSEMBLY (AFS ECU)

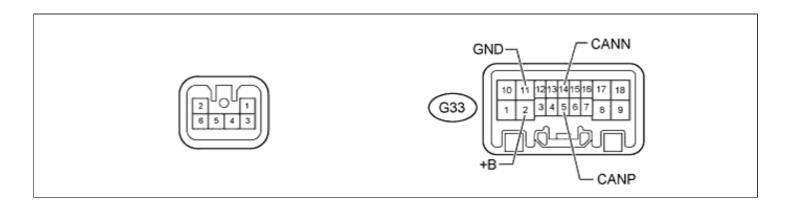


- a. Disconnect the A46 headlight swivel ECU assembly (AFS ECU) connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
A46-12 (CANH) - A46-13 (CANL)	V - W	Engine switch off	54 to 69 Ω
A46-12 (CANH) - A46-22 (E1)	V - W-B	Engine switch off	200 $\Omega$ or higher

A46-13 (CANL) - A46-22 (E1)	W - W-B	Engine switch off	$200~\Omega$ or higher
A46-12 (CANH) - G37-16 (BAT)	V - GR	Engine switch off	6 kΩ or higher
A46-13 (CANL) - G37-16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

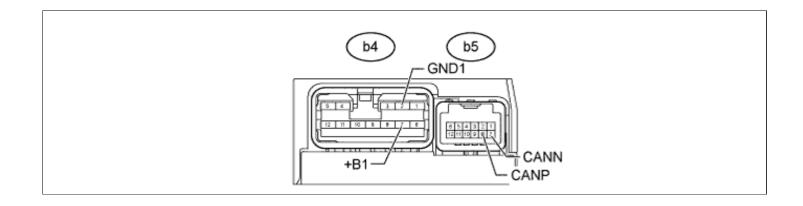
# CHECK MULTIPLEX TILT AND TELESCOPIC ECU



- **a.** Disconnect the G33 multiplex tilt and telescopic ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G33-5 (CANP) - G33- 14 (CANN)	GR - W	Engine switch off	54 to 69 Ω
G33-5 (CANP) - G33- 11 (GND)	GR - W-B	Engine switch off	200 Ω or higher
G33-14 (CANN) - G33-11 (GND)	W - W-B	Engine switch off	200 Ω or higher
G33-5 (CANP) - G33- 2 (+B)	GR - G	Engine switch off	6 kΩ or higher
G33-14 (CANN) - G33-2 (+B)	W - G	Engine switch off	6 kΩ or higher

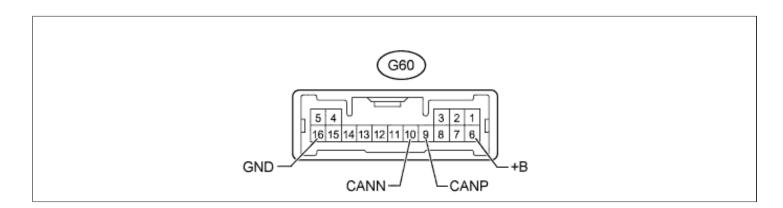
# **CHECK FRONT POWER SEAT SWITCH LH**



- **a.** Disconnect the b4 and b5 front power seat switch LH connectors.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
b5-8 (CANP) - b5-7 (CANN)	L - W	Engine switch off	54 to 69 Ω
b5-8 (CANP) - b4-2 (GND1)	L - W-B	Engine switch off	$200~\Omega$ or higher
b5-7 (CANN) - b4-2 (GND1)	W - W-B	Engine switch off	$200~\Omega$ or higher
b5-8 (CANP) - b4-7 (+B1)	L - W	Engine switch off	6 kΩ or higher
b5-7 (CANN) - b4-7 (+B1)	w - w	Engine switch off	6 kΩ or higher

# **CHECK DRIVING SUPPORT SWITCH CONTROL ECU**

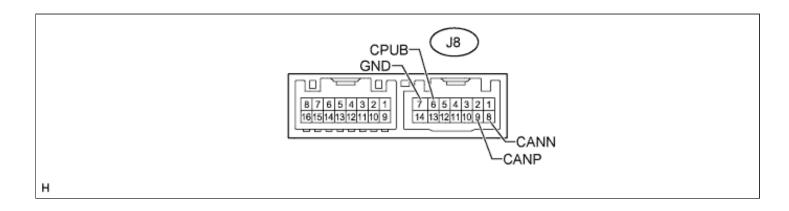


- **a.** Disconnect the G60 driving support switch control ECU connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
G60-9 (CANP) - G60-	R - W	Engine switch off	54 to 69 Ω

10 (CANN)			
G60-9 (CANP) - G60- 16 (GND)	R - W-B	Engine switch off	200 $\Omega$ or higher
G60-10 (CANN) - G60-16 (GND)	W - W-B	Engine switch off	200 $\Omega$ or higher
G60-9 (CANP) - G60- 6 (+B)	R - L	Engine switch off	6 kΩ or higher
G60-10 (CANN) - G60-6 (+B)	W - L	Engine switch off	6 kΩ or higher

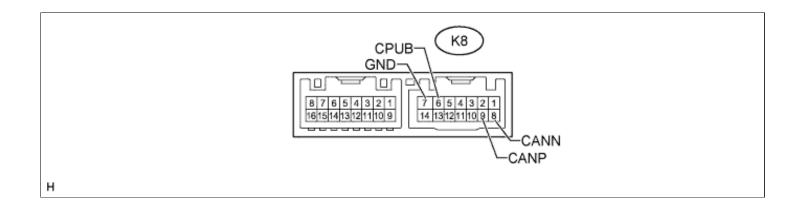
#### **CHECK OUTER MIRROR CONTROL ECU ASSEMBLY RH**



- **a.** Disconnect the J8 outer mirror control ECU assembly RH connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
J8-9 (CANP) - J8-8 (CANN)	G - W	Engine switch off	54 to 69 Ω
J8-9 (CANP) - J8-7 (GND)	G - W-B	Engine switch off	200 Ω or higher
J8-8 (CANN) - J8-7 (GND)	W - W-B	Engine switch off	200 Ω or higher
J8-9 (CANP) - J8-6 (CPUB)	G - L	Engine switch off	6 kΩ or higher
J8-8 (CANN) - J8-6 (CPUB)	W - L	Engine switch off	6 kΩ or higher

#### CHECK OUTER MIRROR CONTROL ECU ASSEMBLY LH



- a. Disconnect the K8 outer mirror control ECU assembly LH connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
K8-9 (CANP) - K8-8 (CANN)	B - W	Engine switch off	54 to 69 Ω
K8-9 (CANP) - K8-7 (GND)	B - W-B	Engine switch off	200 $\Omega$ or higher
K8-8 (CANN) - K8-7 (GND)	W - W-B	Engine switch off	200 Ω or higher
K8-9 (CANP) - K8-6 (CPUB)	B - L	Engine switch off	6 kΩ or higher
K8-8 (CANN) - K8-6 (CPUB)	W - L	Engine switch off	6 kΩ or higher

## CHECK MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Pre-crash Safety System)

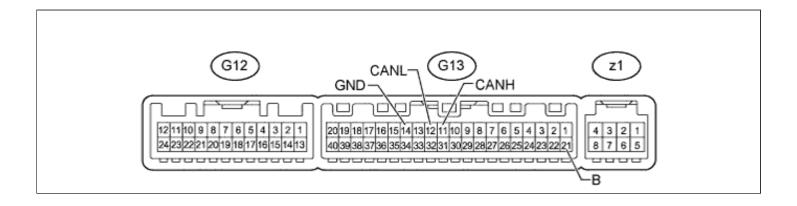


- a. Disconnect the A12 millimeter wave radar sensor assembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Switch Condition	Specified Condition
A12-4 (CA1P) - A12-	LG - W	Engine switch off	108 to 132 Ω

3 (CA1N)			
A12-4 (CA1P) - A12- 2 (SGND)	LG - BR	Engine switch off	200 $\Omega$ or higher
A12-3 (CA1N) - A12- 2 (SGND)	W - BR	Engine switch off	200 $\Omega$ or higher
A12-4 (CA1P) - G37- 16 (BAT)	LG - GR	Engine switch off	6 kΩ or higher
A12-3 (CA1N) - G37- 16 (BAT)	W - GR	Engine switch off	6 kΩ or higher

### **CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY**



- **a.** Disconnect the G13 air conditioning amplifier assembly connector.
- **b.** Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Condition	Specified Condition
G13-11 (CANH) - G13-12 (CANL)	BR - Y	Engine switch off	54 to 69 Ω
G13-11 (CANH) - G13-14 (GND)	BR - W-B	Engine switch off	200 Ω or higher
G13-12 (CANL) - G13-14 (GND)	Y - W-B	Engine switch off	200 Ω or higher
G13-11 (CANH) - G13-21 (B)	BR - V	Engine switch off	6 kΩ or higher
G13-12 (CANL) - G13-21 (B)	Y - V	Engine switch off	6 kΩ or higher