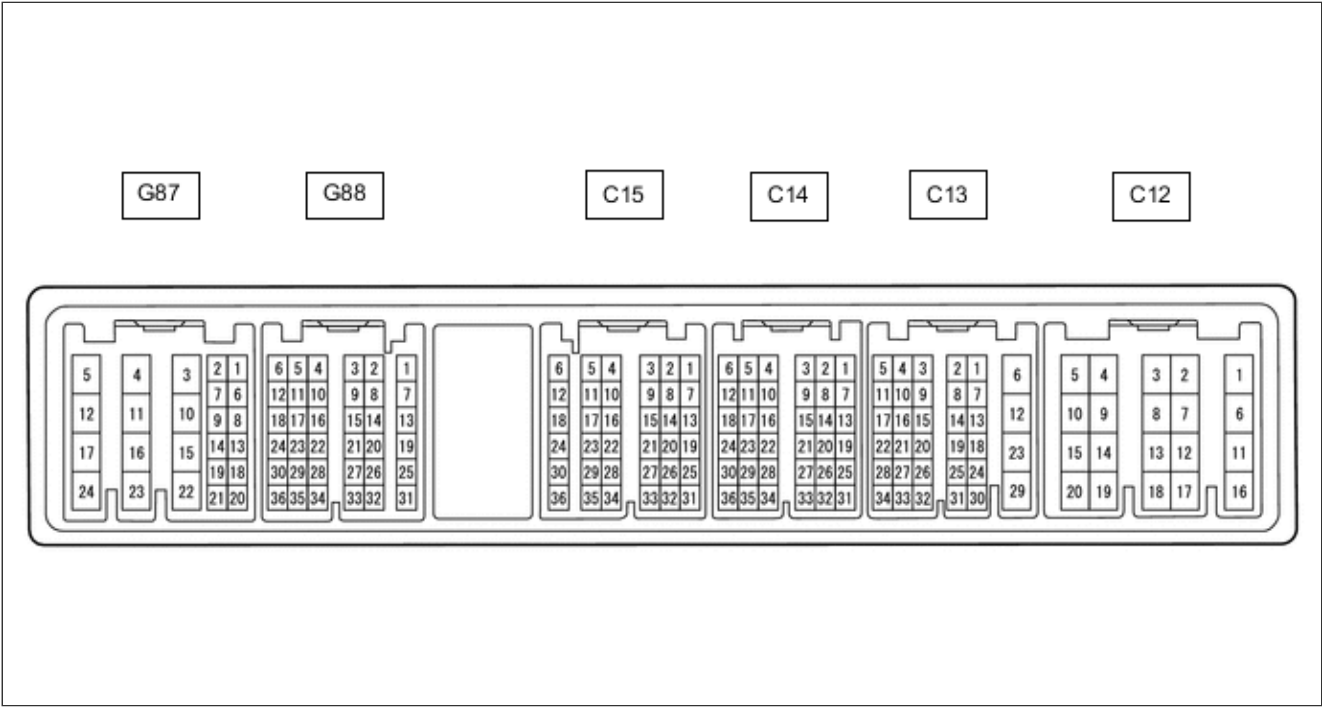


CRUISE CONTROL SYSTEM TERMINALS OF ECU

1. CHECK ECM (for 1GR-FE)



Tech Tips

Each ECM terminal's standard voltage is shown in the table below.

In the table, first follow the information under "Condition". Look under "Terminal No. (Symbol)" for the terminals to be inspected. The standard voltage between the terminals is shown under "Specified Condition".

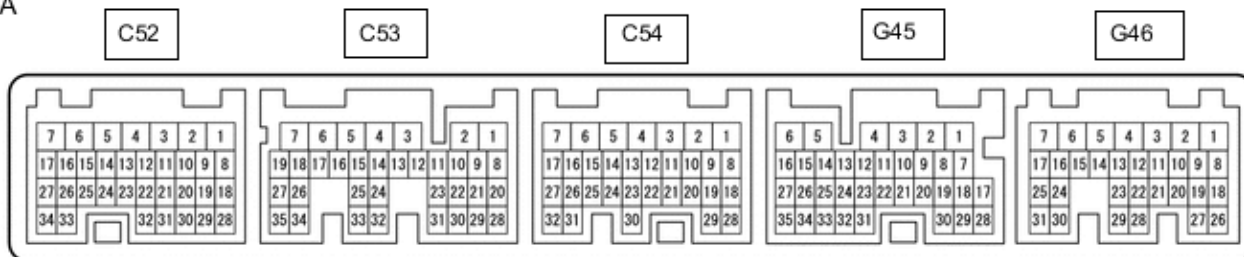
Use the illustration above as a reference for the ECM terminals.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
C13-12 (E1) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
C15-22 (D) - C13-12 (E1)	GR - BR	D shift position switch signal	Ignition switch ON and shift lever in D, S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in D, S, "+" or "-"	Below 1 V
G87-24 (BATT) - C13-12 (E1)	Y - BR	Battery (for measuring battery voltage and for ECM memory)	Always	11 to 14 V
G88-9 (SFTD) - C13-12 (E1)	G - BR	Down-shift position switch signal	Ignition switch ON and shift lever in S	11 to 14 V

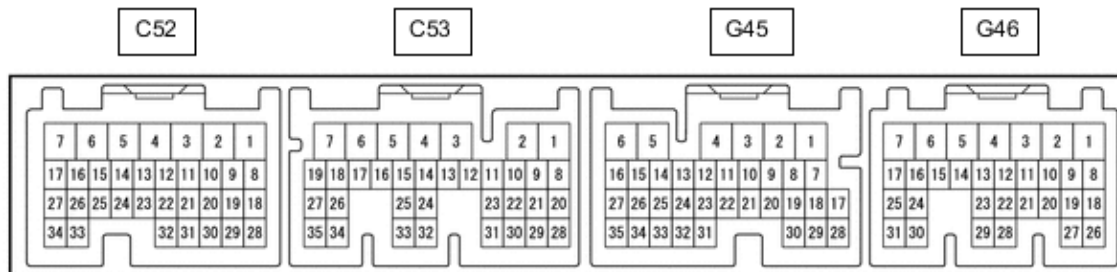
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
			Ignition switch ON and shift lever in "-" (down-shift)	Below 1 V
G88-15 (SFTU) - C13-12 (E1)	W - BR	Up-shift position switch signal	Ignition switch ON and shift lever in S	11 to 14 V
			Ignition switch ON and shift lever in "+" (up-shift)	Below 1 V
G88-22 (S) - C13-12 (E1)	L - BR	S shift position switch signal	Ignition switch ON and shift lever in S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in S, "+" or "-"	Below 1 V
G88-1 (CCS) - C13-12 (E1)	G - BR	Cruise control switch circuit	Cruise control main switch off	1 M Ω or higher
			Cruise control main switch on	Below 2.5 Ω
			+RES switch on	235 to 245 Ω
			-SET switch on	617 to 643 Ω
			CANCEL switch on	1509 to 1571 Ω
G88-34 (ST1-) - C13-12 (E1)	GR - BR	Stop light switch assembly signal (opposite of voltage at STP terminal)	Ignition switch ON, brake pedal depressed	Below 1.5 V
			Ignition switch ON, brake pedal released	7.5 to 14 V
G88-35 (STP) - C13-12 (E1)	L - BR	Stop light switch assembly signal	Brake pedal depressed	7.5 to 14 V
			Brake pedal released	Below 1.5 V

2. CHECK ECM (for 2TR-FE)

*A



*B



*A	for Automatic Transmission	*B	for Manual Transmission
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Tech Tips

Each ECM terminal's standard voltage is shown in the table below.

In the table, first follow the information under "Condition". Look under "Terminal No. (Symbol)" for the terminals to be inspected. The standard voltage between the terminals is shown under "Specified Condition".

Use the illustration above as a reference for the ECM terminals.

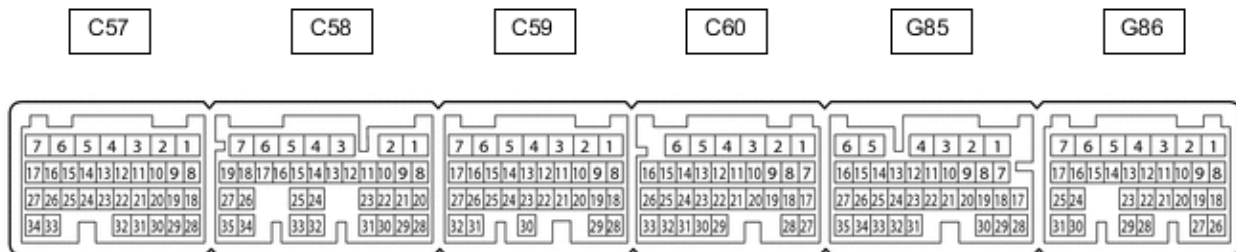
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
C52-3 (E1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
C54-17 (SFTU) - C52-3 (E1)*2	W - W-B	Up-shift position switch signal	Ignition switch ON and shift lever in S	11 to 14 V
			Ignition switch ON and shift lever in "+" position (up-shift)	Below 1 V
C54-27 (SFTD) - C52-3 (E1)*2	G - W-B	Down-shift position switch signal	Ignition switch ON and shift lever in S	11 to 14 V
			Ignition switch ON and shift lever in "-" (down-shift)	Below 1 V
C54-30 (S) - C52-3 (E1)*2	L - W-B	S shift position switch signal	Ignition switch ON and shift lever in S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in S, "+" or "-"	Below 1 V

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
G45-18 (D) - C52-3 (E1)*1	P - W-B	Clutch switch signal	Ignition switch ON, clutch pedal depressed	Below 1 V
			Ignition switch ON, clutch pedal released	11 to 14 V
G45-18 (D) - C52-3 (E1)*2	P - W-B	D shift position signal	Ignition switch ON and shift lever in D, S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in D, S, "+" or "-"	Below 1 V
G45-22 (CCS) - G45-21 (ECCS)	G - BR	Cruise control switch circuit	Cruise control main switch off	1 MΩ or higher
			Cruise control main switch on	Below 2.5 Ω
			+RES switch on	235 to 245 Ω
			-SET switch on	617 to 643 Ω
			CANCEL switch on	1509 to 1571 Ω
G46-3 (BATT) - C52-3 (E1)	Y - W-B	Battery (for measuring battery voltage and for ECM memory)	Always	11 to 14 V
G46-10 (STP) - C52-3 (E1)	L - W-B	Stop light switch assembly signal	Brake pedal depressed	7.5 to 14 V
			Brake pedal released	Below 1.5 V
G46-11 (ST1-) - C52-3 (E1)	GR - W- B	Stop light switch assembly signal (opposite to voltage at STP terminal)	Ignition switch ON, brake pedal depressed	Below 1.5 V
			Ignition switch ON, brake pedal released	7.5 to 14 V

*1: for Manual Transmission

*2: for Automatic Transmission

3. CHECK ECM (for 1GD-FTV, 2GD-FTV)



Y

Tech Tips

Each ECM terminal's standard voltage is shown in the table below.

In the table, first follow the information under "Condition". Look under "Terminal No. (Symbol)" for the terminals to be inspected. The standard voltage between the terminals is shown under "Specified Condition".

Use the illustration above as a reference for the ECM terminals.

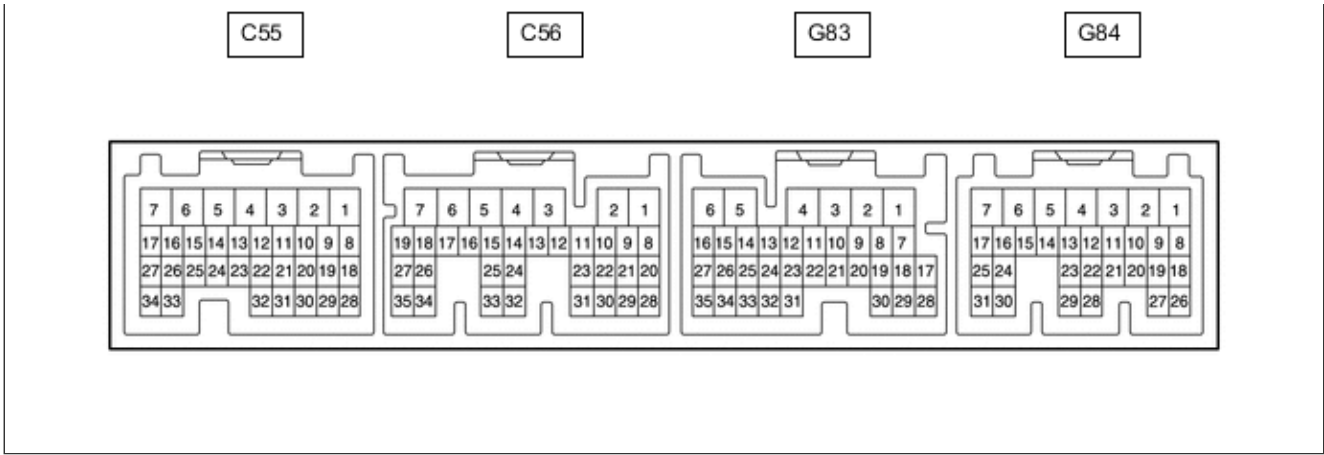
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
C57-14 (D) - C60-1 (E1)*1	GR - W-B	Clutch switch signal	Ignition switch ON, clutch pedal depressed	Below 1 V
			Ignition switch ON, clutch pedal released	11 to 14 V
C57-14 (D) - C60-1 (E1)*2	GR - W-B	D shift position signal	Ignition switch ON and shift lever in D, S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in D, S, "+" or "-"	Below 1 V
C60-1 (E1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
G85-13 (S) - C60-1 (E1)*2	L - W-B	S shift position switch signal	Ignition switch ON and shift lever in S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in S, "+" or "-"	Below 1 V
G85-20 (SFTD) - C60-1 (E1)*2	G - W-B	Down-shift switch signal	Ignition switch ON and shift lever in S	11 to 14 V
			Ignition switch ON and shift lever in "-" (down-shift)	Below 1 V
G85-21 (SFTU) - C60-1 (E1)*2	W - W-B	Up-shift switch signal	Ignition switch ON and shift lever in S	11 to 14 V
Terminal No.	Wiring	Terminal Description	Condition	Specified

(Symbol)	Color	Terminal Description	Condition	Condition
			Ignition switch ON and shift lever in "+" (up-shift)	Below 1 V
G86-1 (BATT) - C60-1 (E1)	Y - W-B	Battery (for measuring battery voltage and for ECM memory)	Always	11 to 14 V
G86-12 (ST1-) - C60-1 (E1)	GR - W-B	Stop light switch assembly signal (opposite to voltage at STP terminal)	Ignition switch ON, brake pedal depressed	0 to 1.5 V
			Ignition switch ON, brake pedal released	7.5 to 14 V
G86-13 (STP) - C60-1 (E1)	L - W-B	Stop light switch assembly signal	Brake pedal depressed	7.5 to 14 V
			Brake pedal released	0 to 1.5 V
G86-26 (CCS) - C60-1 (E1)	G - W-B	Cruise control switch circuit	Cruise control main switch off	1 M Ω or higher
			Cruise control main switch on	Below 2.5 Ω
			+RES switch on	235 to 245 Ω
			-SET switch on	617 to 643 Ω
			CANCEL switch on	1509 to 1571 Ω

*1: for Manual Transmission

*2: for Automatic Transmission

4. CHECK ECM (for 1KD-FTV)



Tech Tips

Each ECM terminal's standard voltage is shown in the table below.

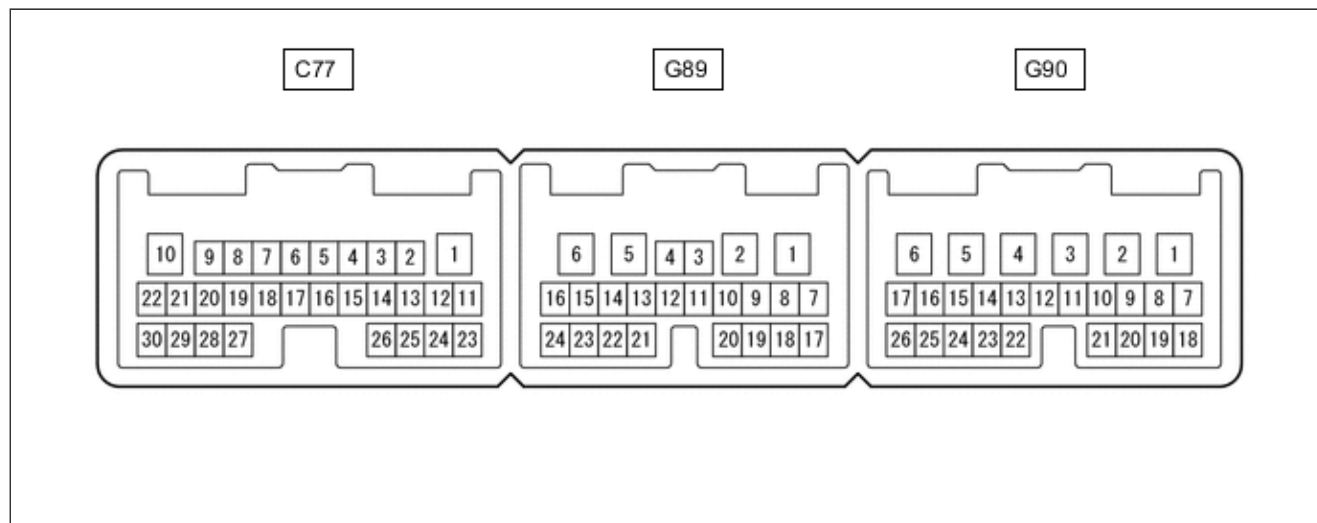
In the table, first follow the information under "Condition". Look under "Terminal No. (Symbol)" for the terminals to be inspected. The standard voltage between the terminals is shown under "Specified Condition".

Use the illustration above as a reference for the ECM terminals.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
C56-7 (E1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
G83-2 (BATT) - C56-7 (E1)	Y - W-B	Battery (for measuring the battery voltage and for the ECM memory)	Always	11 to 14 V
G83-14 (ST1-) - C56-7 (E1)	GR - W-B	Stop light switch assembly signal (opposite to voltage at STP terminal)	Ignition switch ON, brake pedal depressed	0 to 1.5 V
			Ignition switch ON, brake pedal released	7.5 to 14 V
G83-15 (STP) - C56-7 (E1)	L - W-B	Stop light switch assembly signal	Brake pedal depressed	7.5 to 14 V
			Brake pedal released	0 to 1.5 V
G84-21 (CCS) - C56-7 (E1)	G - W-B	Cruise control switch circuit	Cruise control main switch off	1 MΩ or higher
			Cruise control main switch on	Below 2.5 Ω
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition

			+RES switch on	235 to 245 Ω
			-SET switch on	617 to 643 Ω
			CANCEL switch on	1509 to 1571 Ω

5. CHECK TCM (for 1KD-FTV)



Tech Tips

Each TCM terminal's standard voltage is shown in the table below.

In the table, first follow the information under "Condition". Look under "Terminal No. (Symbol)" for the terminals to be inspected. The standard voltage between the terminals is shown under "Specified Condition".

Use the illustration above as a reference for the TCM terminals.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
G89-8 (D) - C77-1 (E1)	P - W-B	D shift position switch signal	Ignition switch ON and shift lever in D, S, "+" or "-"	11 to 14 V
			Ignition switch ON and shift lever not in S, "+" or "-"	Below 1 V
C77-1 (E1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
G90-15 (S) - C77-1 (E1)	L - W-B	S shift position switch signal	Ignition switch ON and shift lever in S, "+" or "-"	11 to 14 V
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition

			Ignition switch ON and shift lever not in S, "+" or "-"	Below 1 V
G90-22 (SFTU) - C77-1 (E1)	W - W-B	Up-shift position switch signal	Ignition switch ON and shift lever in S	11 to 14 V
			Ignition switch ON and shift lever in "+" position (up-shift)	Below 1 V
G90-23 (SFTD) - C77-1 (E1)	G - W-B	Down-shift position switch signal	Ignition switch ON and shift lever in S	11 to 14 V
			Ignition switch ON and shift lever in "-" (down-shift)	Below 1 V