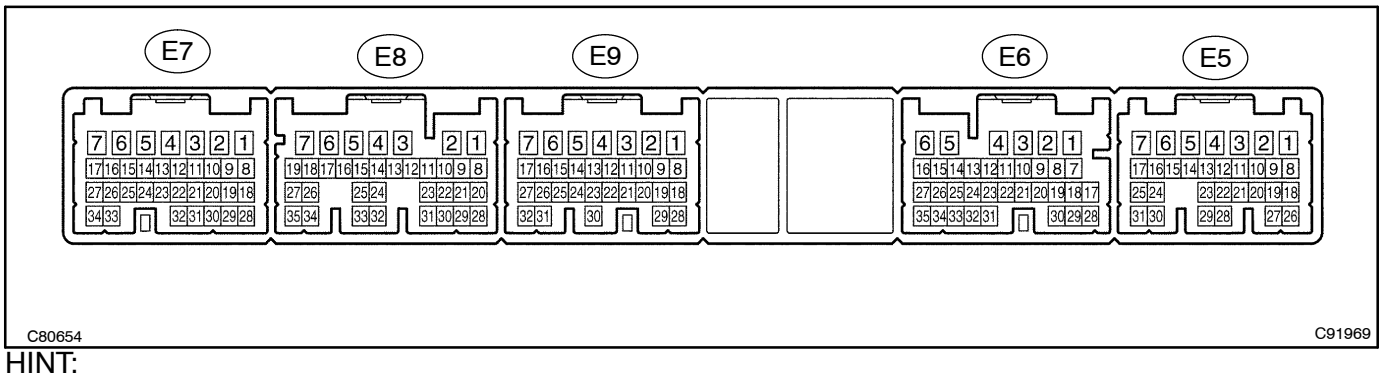
05JP4–01

TERMINALS OF ECM

1. ECM



HINT:

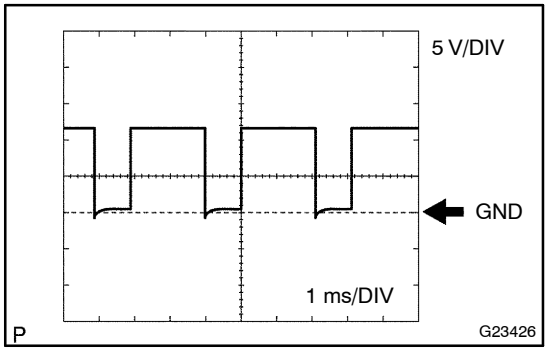
Each ECM terminal's standard voltage is shown in the table below.

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

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

Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specified Condition
P (E5–6) – E1 (E9–1)	V – BR	P shift position switch signal	IG switch ON and shift lever P position	10 to 14 V
			IG switch ON and shift lever except P position	Below 1 V
N (E5–7) – E1 (E9–1)	GR – BR	N shift position switch signal	IG switch ON and shift lever N position	10 to 14 V
			IG switch ON and shift lever except N position	Below 1 V
L (E6–8) – E1 (E9–1)	R – BR	L shift position switch signal	IG switch ON and shift lever L position	10 to 14 V
			IG switch ON and shift lever except L position	Below 1 V
2 (E6–9) – E1 (E9–1)	G – BR	2 shift position switch signal	IG switch ON and shift lever 2 and L position	10 to 14 V
			IG switch ON and shift lever except 2 and L position	Below 1 V
D (E6–10) – E1 (E9–1)	Y – BR	D shift position switch signal	IG switch ON and shift lever D position	10 to 14 V
			IG switch ON and shift lever except D position	Below 1 V
R (E6–11) – E1 (E9–1)	L – BR	R shift position switch signal	IG switch ON and shift lever R position	10 to 14 V
			IG switch ON and shift lever except R position	Below 1 V
SPD (E6–17) – E1 (E9–1)	Y – BR	Speed signal	Vehicle speed 20 km/h (12 mph)	Pulse generation (See waveform 8)
STP (E6–19) – E1 (E9–1)	BR – BR	Stop lamp switch signal	Brake pedal is depressed	7.5 to 14 V
			Brake pedal is released	Below 1.5 V
3 (E6–20) – E1 (E9–1)	P – BR	3 shift position switch signal	IG switch ON and shift lever 3 position	10 to 14 V
			IG switch ON and shift lever except 3 position	Below 1 V

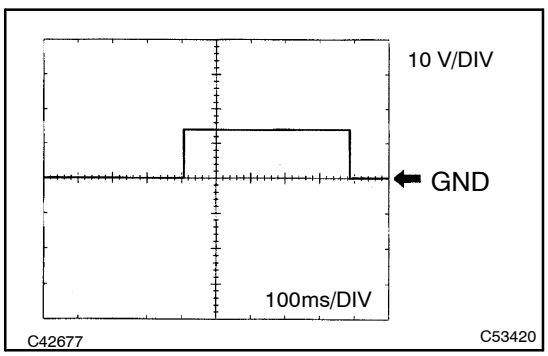
NSW (E7–16) – E1 (E9–1)	B–R – BR	Park neutral switch signal	IG switch ON and shift lever P and N position	Below 1 V
			IG switch ON and shift lever except P and N position	10 to 14 V
DSL (E8–11) – E1 (E9–1)	Y–G – BR	DSL solenoid signal	Vehicle speed 65 km/h (40 mph), lock–up (ON to OFF)	Pulse generation (See waveform 2)
SR (E8–9) – E1 (E9–1)	L–B – BR	SR solenoid signal	IG switch ON	Below 1 V
			3rd, 4th or 5th gear	10 to 14 V
			1st or 2nd gear	Below 1 V
ODMS (E5–16) – E1 (E9–1)	GR – BR	O/D main switch	IG switch ON	10 to 14 V
↑	↑	↑	IG switch ON and press continuously O/D main switch	Below 1 V
S4 (E8–10) – E1 (E9–1)	L–W – BR	S4 solenoid signal	IG switch ON	Below 1 V
			5th gear	10 to 14 V
			Except 5th gear	Below 1 V
SL3+ (E8–17) – SL3– (E8–16)	G–B – G–R	SL3 solenoid signal	Engine idle speed	Pulse generation (See waveform 3)
SL2+ (E8–15) – SL2– (E8–14)	L–Y – L–R	SL2 solenoid signal	Engine idle speed	Pulse generation (See waveform 4)
SL1+ (E8–19) – SL1– (E8–18)	R–B – B–W	SL1 solenoid signal	Engine idle speed	Pulse generation (See waveform 5)
NC+ (E8–26) – NC– (E8–34)	R – W–G	Speed sensor (NC) signal	Vehicle speed 30 km/h (19 mph): (3rd gear) Engine speed 1,400 rpm	Pulse generation (See waveform 6)
NT+ (E8–27) – NT– (E8–35)	W – R–W	Speed sensor (NT) signal	Vehicle speed 20 km/h (12 mph)	Pulse generation (See waveform 7)
SLT+ (E8–13) – SLT– (E8–12)	Y–R – Y–B	SLT solenoid signal	Engine idle speed	Pulse generation (See waveform 1)
THO (E8–32) – E2 (E7–28)	G–Y – BR	ATF temperature sensor signal	ATF temperature: 115 °C (239 °F) or more	Below 1.5 V



Waveform 1

Reference:

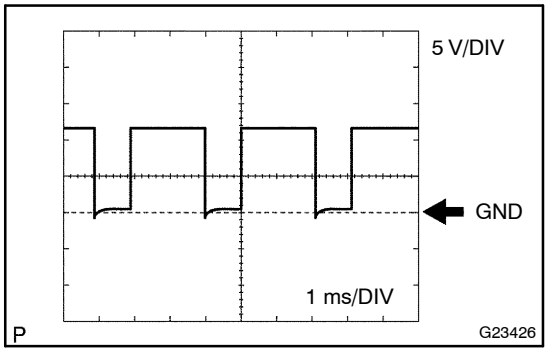
Terminal	SLT+ – SLT–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



Waveform 2

Reference:

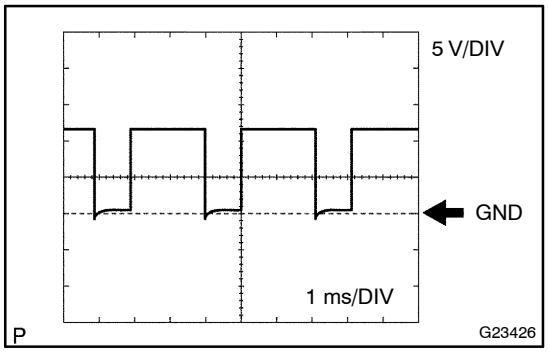
Terminal	DSL – E1
Tool setting	10V/DIV, 100ms/DIV
Vehicle condition	Vehicle speed 65 km/h (40 mph), lock–up (ON to OFF)



Waveform 3

Reference:

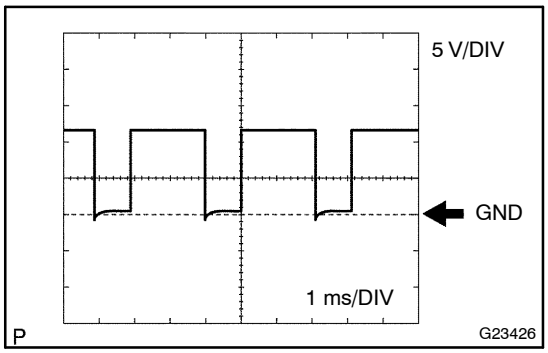
Terminal	SL3+ – SL3–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



Waveform 4

Reference:

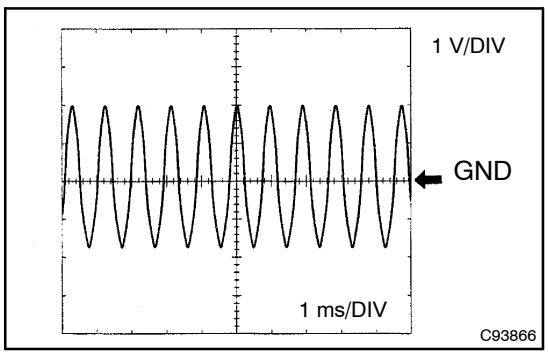
Terminal	SL2+ – SL2–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



Waveform 5

Reference:

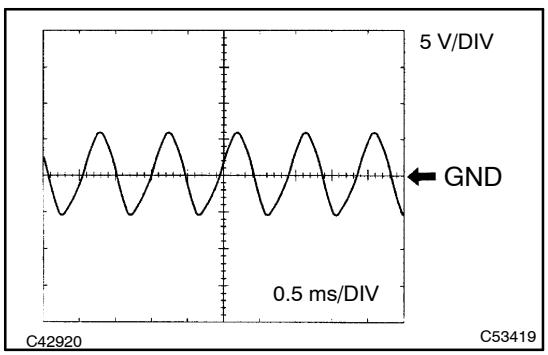
Terminal	SL1+ – SL1–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



Waveform 6

Reference:

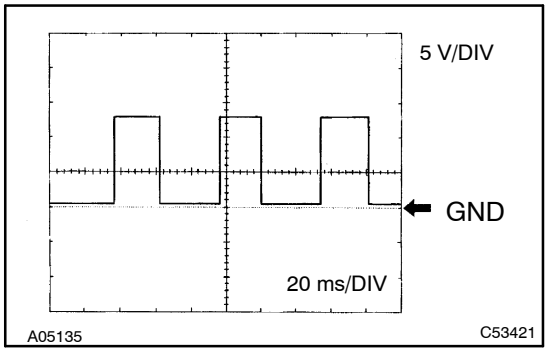
Terminal	NC+ – NC–
Tool setting	1V/DIV, 1ms/DIV
Vehicle condition	Vehicle speed 30 km/h (19 mph): (3rd gear) Engine speed 1,400 rpm



Waveform 7

Reference:

Terminal	NT+ – NT–
Tool setting	5V/DIV, 0.5ms/DIV
Vehicle condition	Vehicle speed 20 km/h (12 mph)



Waveform 8

Reference:

Terminal	SPD – E1
Tool setting	5V/DIV, 20ms/DIV
Vehicle condition	Vehicle speed 20 km/h (12 mph)