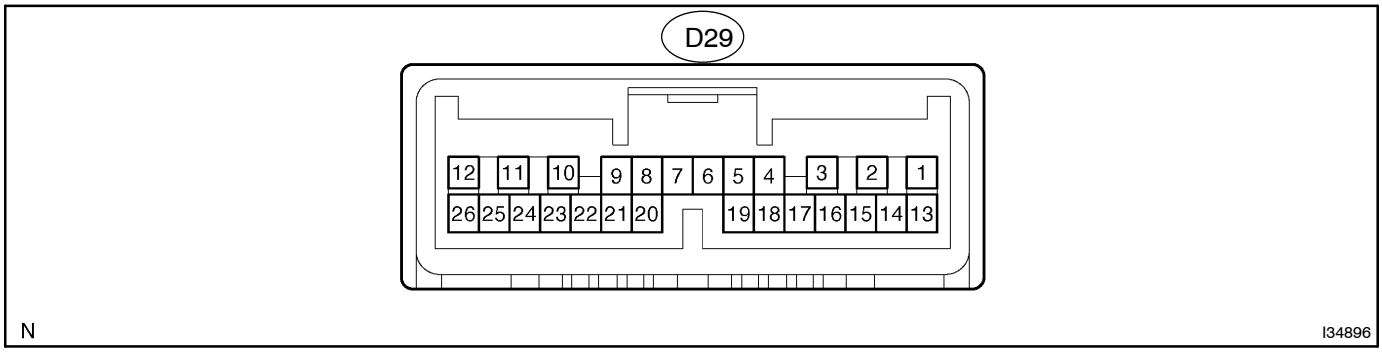
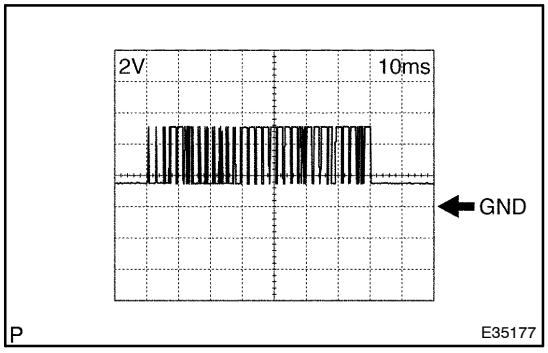
05H0Y–01

TERMINALS OF ECU

1. DISTANCE CONTROL ECU



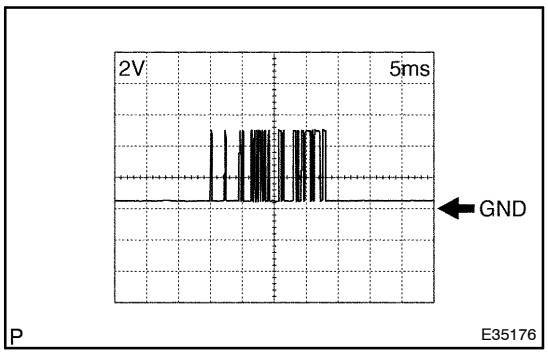
Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specified Condition
+B – GND (D29–1 – D29–12)	R–B – BR	Battery	Always	10 to 14 V
CANH (D29 – 8)	LG	CAN communication signal	CAN communication circuit	–
CANL (D29 – 9)	L	CAN communication signal	CAN communication circuit	–
SGND – Body ground (D29–10 – Body ground)	BR – Body ground	Ground	Always	Below 1 Ω
GND – Body ground (D29–12 – Body ground)	BR – Body ground	Ground	Always	Below 1 Ω
IGB – GND (D29–13 – D29–12)	L–O – BR	Ignition switch ON signal	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
LRDD – GND (D29–22 – D29–12)	P–L – BR	Laser sensor input signal	Ignition switch ON	Pulse generation (see waveform 1)
LRRD – GND (D29–23 – D29–12)	L–Y – BR	Laser sensor output signal	Ignition switch ON	Pulse generation (see waveform 2)



(a) Reference: waveform 1

HINT:

- Terminal: LRDD – GND
- Gauge set: 2 V/DIV, 10 ms/DIV
- Condition: Ignition switch ON

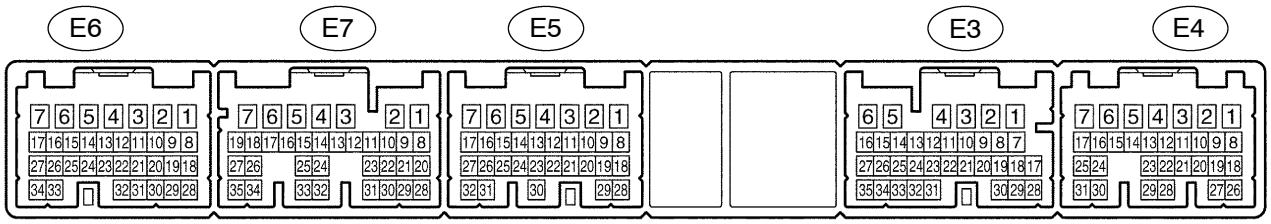


(b) Reference: waveform 2

HINT:

- Terminal: LRRD – GND
- Gauge set: 2 V/DIV, 5 ms/DIV
- Condition: Ignition switch ON

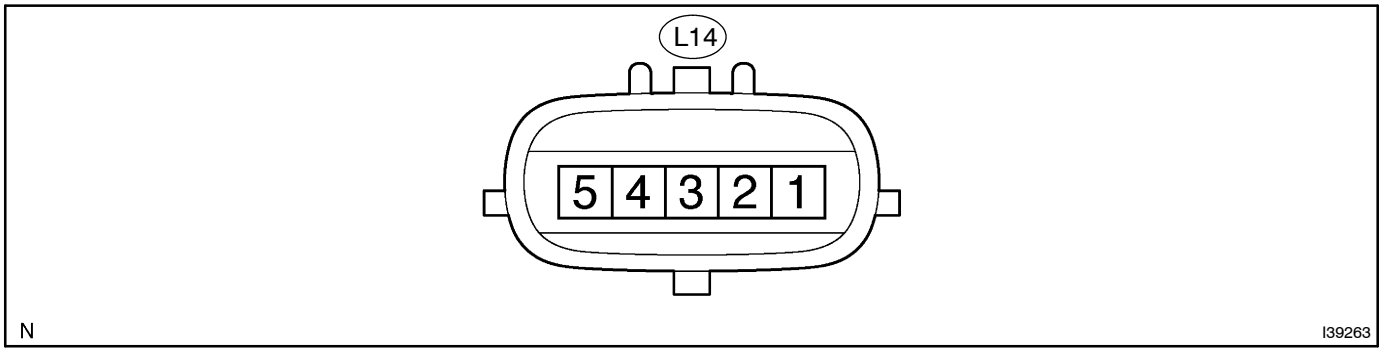
2. ECM



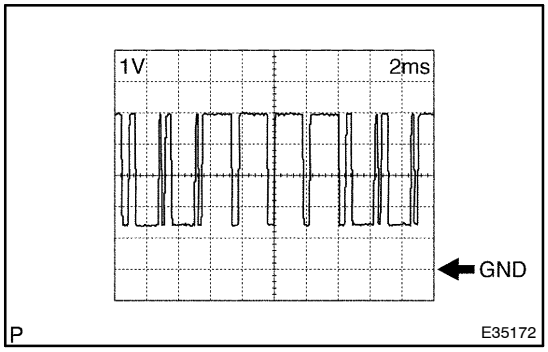
Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specified Condition
STP – E1 (E3–4 – E7–7)	G–O – BR	Stop lamp signal	Brake pedal released (Stop lamp switch OFF) → Brake pedal depressed (Stop lamp switch ON)	Below 1 V → 10 to 14 V
CCS – E1 (E3–31 – E7–7)	W–L – BR	Cruise control main switch signal	Ignition switch ON CANCEL switch ON SET/COAST switch ON RES/ACC switch ON Main switch ON	10 to 16 V 6.6 to 10.1 V 4.5 to 7.1 V 2.3 to 4.0 V Below 1 V
ST1– – E1 (E4–8 – E7–7)	V–Y – BR	Stop lamp signal	Ignition switch ON Brake pedal depressed (Stop lamp switch ON) → Brake pedal released (Stop lamp switch OFF)	Below 1 V → 10 to 14 V
CCHG – E1 (E4–20 – E7–7)	V – BR	Distance control switch signal	Ignition switch ON Cruise control main switch ON MODE switch ON → MODE switch OFF	Below 1 V → 10 to 14 V
LGND – Body ground (E4–29 – Body ground)	BR–Y – Body ground	Ground	Always	Below 1 Ω
E1 – Body ground (E7–7 – Body ground)	BR – Body ground	Ground	Always	Below 1 Ω

If the value is not within the standard range, some defects on the vehicle are suspected.

3. LASER SENSOR



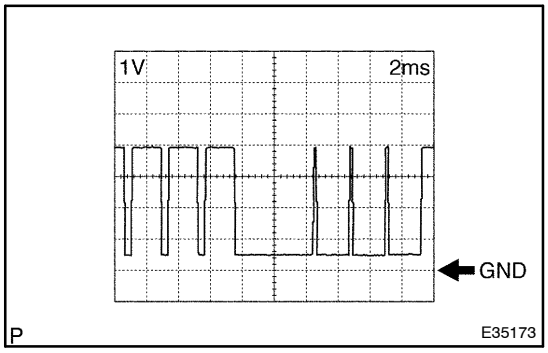
Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
LGND – Body ground (L14–1 – Body ground)	B–L – Body ground	Distance signal	Always	Below 1 Ω
SGND – Body ground (L14–2 – Body ground)	B–R – Body ground	Ground	Always	Below 1 Ω
LRDD – SGND (L14–3 – L14–2)	B–O – B–R	Laser sensor output signal	Ignition switch ON	Pulse generation (see waveform 1)
LRRD – SGND (L14–4 – L14–2)	B–Y – B–R	Laser sensor input signal	Ignition switch ON	Pulse generation (see waveform 2)
IGB – SGND (L14–5 – L14–2)	B – B–R	Power source	Ignition switch ON	10 to 14 V



(a) Reference: waveform 1

HINT:

- Terminal: LRDD – SGND
- Gauge set: 1 V/DIV, 2 ms/DIV
- Condition: Ignition switch ON



(b) Reference: waveform 2

HINT:

- Terminal: LRRD – SGND
- Gauge set: 1 V/DIV, 2 ms/DIV
- Condition: Ignition switch ON