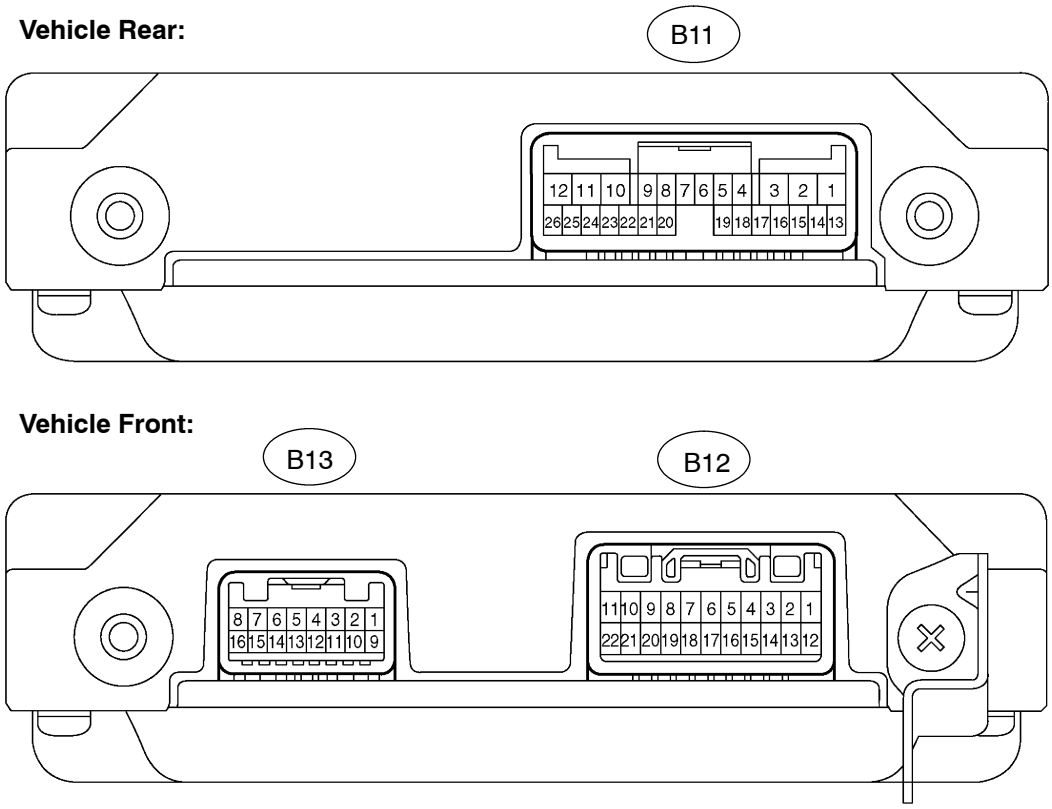
05IGH–01

TERMINALS OF ECU



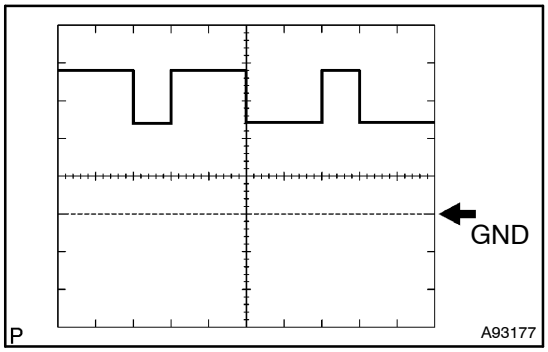
Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	STD Voltage (V)
AM (B11 – 1) – GND (B11 – 12)	G – W–B	Auxiliary battery (for measuring the battery voltage and for the battery ECU memory)	Always	9 to 14
IGCT (B11 – 2) – GND (B11 – 12)	L – W–B	Control signal	Power switch ON (READY)	9 to 14
VM (B11 – 9) – GND (B11 – 12)	V – W–B	Battery blower motor monitoring signal	Battery blower motor mode 1 actuation (at low speed)	10 to 14
VM (B11 – 9) – GND (B11 – 12)	V – W–B	Battery blower motor monitoring signal	Battery blower motor mode 6 actuation (at high speed)	2 to 6
FCTL1 (B11 – 10) – GND (B11 – 12)	BR – W–B	Battery blower relay No. 1	Battery blower motor actuation	Below 1
IG2 (B11 – 13) – GND (B11 – 12)	O – W–B	IG signal	Power switch ON (IG)	9 to 14
CANH (B11 – 18) – GND (B11 – 12)	B – W–B	HIGH–level CAN bus line	Power switch ON (IG)	Pulse generation (See waveform 1)
CANL (B11 – 19) – GND (B11 – 12)	W – W–B	LOW–level CAN bus line	Power switch ON (IG)	Pulse generation (See waveform 2)
SI (B11 – 24) – GND (B11 – 12)	Y – W–B	Battery blower motor actuation signal	Battery blower motor modes 1 to 6 actuation	Pulse generation (See waveform 3)
TB1 (B13 – 1) – GB1 (B13 – 2)	W – W	HV battery temperature sensor 1	HV battery temperature: –40 to 90°C (–40 to 194°F)	4.8 to 1.0
TB2 (B13 – 3) – GB2 (B13 – 4)	B – B	HV battery temperature sensor 2	HV battery temperature: –40 to 90°C (–40 to 194°F)	4.8 to 1.0

Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	STD Voltage (V)
TB3 (B13 – 5) – GB3 (B13 – 6)	L – L	HV battery temperature sensor 3	HV battery temperature: –40 to 90°C (–40 to 194°F)	4.8 to 1.0
TC1 (B13 – 9) – GC1 (B13 – 10)	G – G	Intake air temperature sensor	Intake air temperature: –40 to 90°C (–40 to 194°F)	4.8 to 1.0
VIB (B13 – 15) – GIB (B13 – 14)	—	Power source of battery current sensor (a specific voltage)	Power switch ON (IG)	4.5 to 5.5
IB (B13 – 16) – GIB (B13 – 14)	—	Battery current sensor	Power switch ON (READY)	0.5 to 4.5
GND (B11 – 12) – Body ground	W–B – Body ground	Ground	Always (resistance check)	Below 6 Ω

1. Oscilloscope waveforms

HINT:

In the oscilloscope waveform samples, which are provided here for informational purposes. Noise and fluttering waveforms have been omitted.

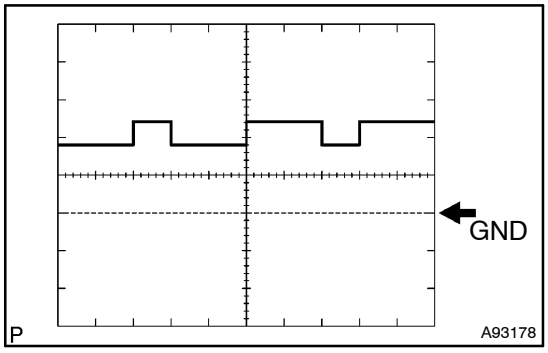


(a) Waveform 1 (HIGH–level CAN bus line)

Item	Contents
Terminal	CANH – GND
Equipment Setting	1 V/Division, 2 μs/Division
Condition	Power switch ON (IG)

HINT:

The waveform varies depending on the contents of the communication.

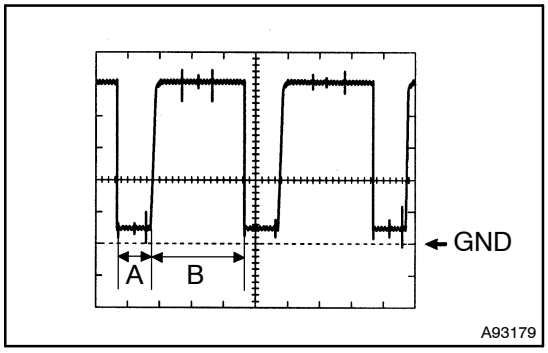


(b) Waveform 2 (LOW–level CAN bus line)

Item	Contents
Terminal	CANH – GND
Equipment Setting	1 V/Division, 2 μs/Division
Condition	Power switch ON (IG)

HINT:

The waveform varies depending on the contents of the communication.



(c) Waveform 3 (battery blower motor actuation signal)

Item	Contents
Terminal	SI – GND
Equipment Setting	1 V/Division, 50 μs/Division
Condition	During vehicle stop

HINT:

Amplitude A and B in the diagram vary by mode.

Mode	A	B
1	44.4 μs	155.6 μs
2	44.4 μs	155.6 μs
3	51.6 μs	148.4 μs
4	59.0 μs	141.0 μs
5	59.0 μs	141.0 μs
6	146.4 μs	53.6 μs