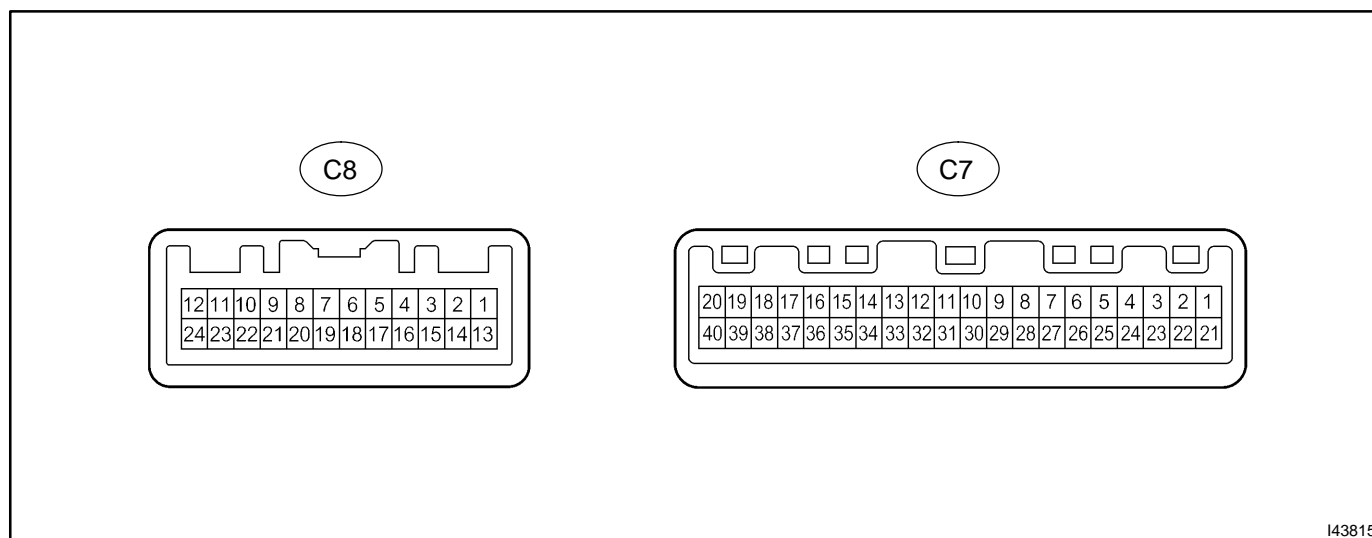


# TERMINALS OF ECU

## 1. COMBINATION METER ASSY



I43815

Terminal No.	Wiring color	Condition	Specified
C7-1 – C7-20	W – W	Always	10 to 14 V
C7-2 – C7-20	W – W	Ignition switch ON and A/T P indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-3 – C7-20	SB – W	Ignition switch ON and turn signal RH indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-4 – C7-20	SB – W	Ignition switch ON and turn signal LH indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-5 – C7-20	W – W	Ignition switch ON and A/T R indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-6 – C7-20	W – W	Ignition switch ON and A/T 3 indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-8 – C7-20	W – W	Ignition switch OFF → ACC or ON	Below 1 V → 10 to 14 V
C7-9 – C7-20	W – W	Ignition switch OFF → START	Below 1 V → 10 to 14 V
C7-11 – C7-20	W – W	Engine idle speed	Pulse generation (See wave form 1)
C7-12 – C7-20	W – W	Ignition switch ON, coolant temperature is 80 to 95°C (176°F to 203°F)	Pulse generation (See wave form 2)
C7-13 – C7-20	W – W	CRUISE indicator light ON → OFF	Below 1 V → 10 to 14 V
C7-14 – C7-20	W – W	Ignition switch ON and driver side seat belt indicator light blinks → OFF	Below 1 V → 10 to 14 V
C7-15 – Body ground	SB – Body ground	Always	Below 1 Ω
C7-16 – C7-20	W – W	Ignition switch ON and brake fluid level warning light ON → OFF	Below 1 V → 10 to 14 V
C7-20 – Body ground	W – Body ground	Always	Below 1 Ω
C7-21 – C7-20	W – W	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
C7-22 – C7-20	W – W	Ignition switch ON and A/T N indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-23 – C7-20	W – W	Ignition switch ON and A/T D indicator light OFF → ON	Below 1 V → 10 to 14 V

C7-24 – C7-20	W – W	Ignition switch ON and A/T 2 indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-25 – C7-20	W – W	Ignition switch ON and A/T L indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-26 – C7-20	W – W	Light control switch OFF → ON	Below 1 V → 10 to 14 V
C7-27 – C7-20	SB – W	Ignition switch ON and CHARGE indicator light ON → OFF	Below 1 V → 10 to 14 V
C7-28 – C7-20	SB – W	Hi-beam OFF → ON	Below 1 V → 10 to 14 V
C7-30 – C7-20	W – W	Ignition switch ON and A/T N or P indicator light OFF → ON	Below 1 V → 10 to 14 V
C7-31 – C7-20	SB – W	Ignition switch ON and SRS warning light OFF → ON	10 to 14 V → Below 1 V
C7-33 – C7-20	SB – W	Ignition switch OFF → ON	10 to 14 V → Below 1 V
C7-34 – C7-20	W – W	Ignition switch ON and oil pressure warning light ON → OFF	Below 1 V → 10 to 14 V
C7-35 – C7-20	W – W	Ignition switch ON and turn front wheel slowly	Pulse generation (See wave form 3)
C7-36 – C7-20	W – W	Ignition switch ON and turn front wheel slowly	Pulse generation (See wave form 3)
C7-38 (*1) – C7-20	SB – W	Headlight switch OFF → ON	Below 1 V → 10 to 14 V
C7-39 – Body ground	SB – Body ground	P-belt indicator light ON → OFF	10 to 14 V → Below 1 V
C7-40 – Body ground	W – Body ground	Always	Below 1 Ω
C8-1 – C7-20	G – W	Always	Below 1 Ω
C8-3 – C7-20	R-Y – W	Ignition switch ON and parking brake switch is not operated → operate	Below 1 V → 10 to 14 V
C8-4 – C7-20	R-B – W	Ignition switch ON and ABS warning light OFF → ON	Below 1 V → 10 to 14 V
C8-7 – C7-20	LG (*2) Y (*3) – W	Ignition switch OFF → ON	Below 1 V → 4 to 7 V
C8-8 – C7-20	LG – W	Ignition switch OFF and key reminder buzzer sound → no sound	Below 1 V → 10 to 14 V
C8-9 – C7-20	R-B – W	Any door open → close	Below 1 V → 10 to 14 V
C8-11 – C8-12	W-G – W-B	Ignition switch ON and light switch ON	Pulse generation (See wave form 4)
C8-13 – C7-20	LG – W	Ignition switch ON and SLIP indicator light ON → OFF	Below 1 V → 10 to 14 V
C8-14 – C7-20	R-L – W	Ignition switch ON and TRC/VSC indicator light ON → OFF	Below 1 V → 10 to 14 V
C8-15 – C7-20	L – W	Ignition switch ON and VSC OFF indicator light ON → OFF	Below 1 V → 10 to 14 V
C8-16 – C7-20	G-R – W	Ignition switch ON and CHECK ENGINE warning light ON → OFF	Below 1 V → 10 to 14 V
C8-17 (*4) – C7-20	LG-R – W	Ignition switch ON	Pulse generation
C8-18 – C7-20	G-W – W	Ignition switch ON and fuel level EMPTY → FULL	Below 1 V → 4 to 7 V
C8-19 – C7-20	Y-R – W	Always	4 to 7 V
C8-20 – C7-20	O (*2) W (*3) – W	Tail cancel ON → OFF	4 to 7 V → Below 1 V

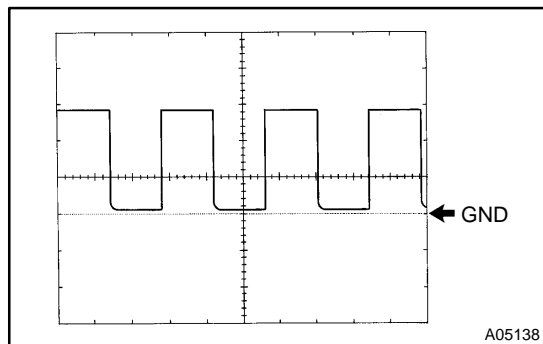
C8-21 – C7-20	P-L – W	Ignition switch ON and washer level warning light ON → OFF	Below 1 V → 10 to 14 V
C8-22 – C7-20	O – W	Ignition switch ON and O/D OFF indicator light ON → OFF	Below 1 V → 10 to 14 V

(\*1): U.S.A. Only

(\*2): TMC Made

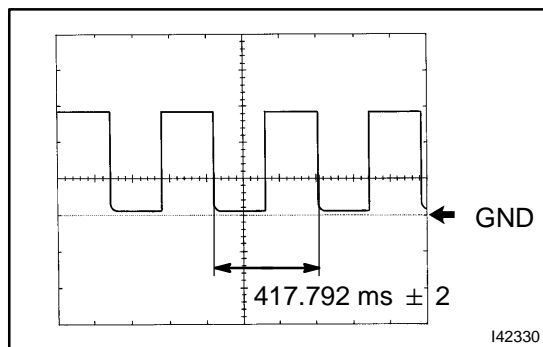
(\*3): TMMK Made

(\*4): Automatic A/C



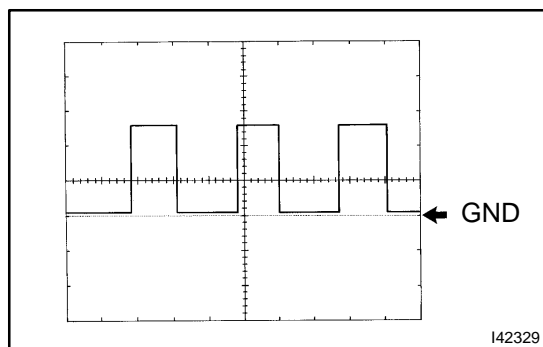
Wave form 1: Reference: Using oscilloscope:

Item	Condition
Tool setting	5 V/DIV, 10 ms/DIV
Vehicle condition	Engine idle speed



Wave form 2: Reference: Using oscilloscope:

Item	Condition
Tool setting	5 V/DIV, 10 ms/DIV
Vehicle condition	Ignition switch ON

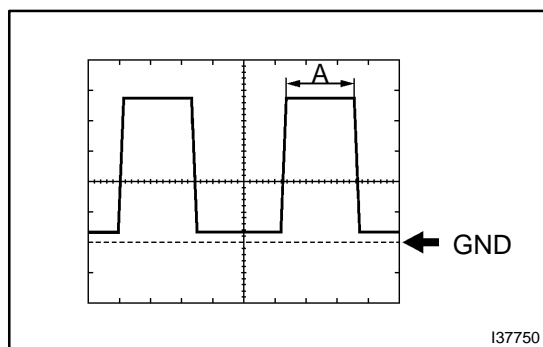


Wave form 3: Reference: Using oscilloscope:

Item	Condition
Tool setting	5 V/DIV, 20 ms/DIV
Vehicle condition	Driving at approx. 20 km/h (12 mph)

HINT:

As vehicle speed increases, the cycle of the signal wave form narrows.



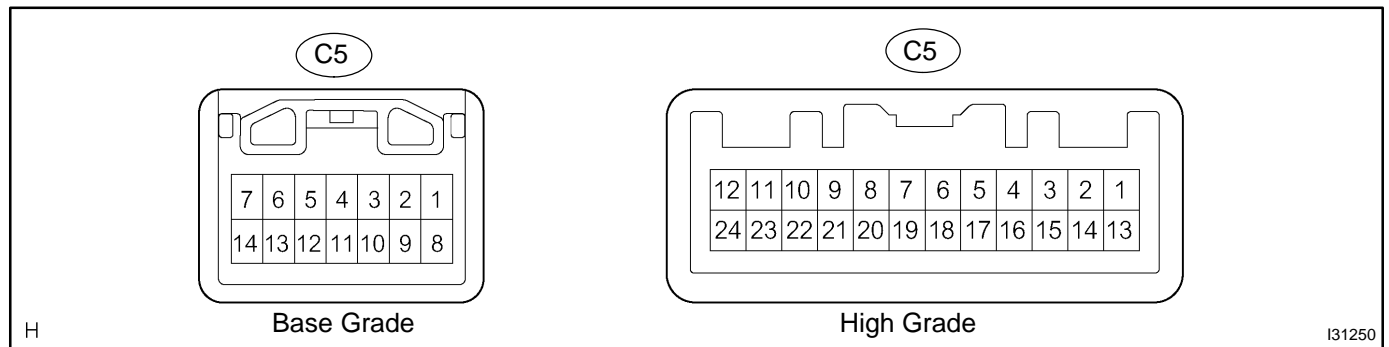
Wave form 4: Reference: Using oscilloscope:

Item	Condition
Tool setting	2 V/DIV, 1 ms/DIV
Vehicle condition	Ignition switch ON

HINT:

Duty ratio changes as illumination becomes darker ("A" becomes longer).

## 2. CLOCK ASSY



## (a) BASE GRADE

Terminal No.	Wiring color	Condition	Specified
C5-1 – Body ground	W-B – Body ground	Always	Below 1 $\Omega$
C5-2 – Body ground	B-W – Body ground	Always	Below 1 $\Omega$
C5-3 – C5-2	G-R – B-W	Ignition switch ACC or ON and outside temperature 50°C (122°F) → -30°C (-22°F)	0.5 V → 4.3 V
		Ignition switch ACC or ON and outside temperature 25°C (77°F)	1.3 V
C5-5 – Body ground	R-B – Body ground	Ignition switch ON and passenger air bag ON indicator light OFF → ON	10 to 14 V → Below 1 V
C5-7 – Body ground	R – Body ground	Ignition switch ON and passenger air bag OFF indicator light OFF → ON	10 to 14 V → Below 1 V
C5-8 – Body ground	L-Y – Body ground	Passenger side seat belt warning light flash → OFF	Below 1 V → 10 to 14 V
C5-9 – Body ground	V-W – Body ground	Ignition switch ON and turn front wheel slowly	Pulse generation (See wave form 1)
C5-11 – Body ground	G – Body ground	Tail light switch OFF → ON	Below 1 V → 10 to 14 V
C5-12 – Body ground	R-L – Body ground	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
C5-13 – Body ground	GR – Body ground	Ignition switch OFF → ACC	Below 1 V → 10 to 14 V
C5-14 – Body ground	R – Body ground	Always	10 to 14 V

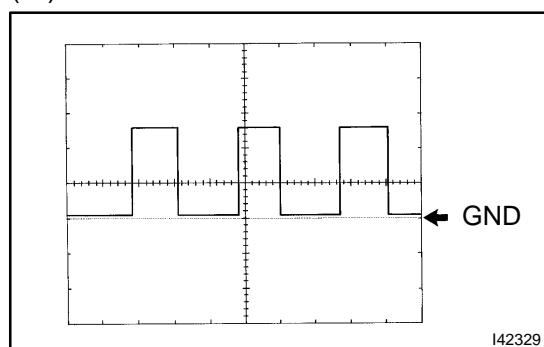
## (b) HIGH GRADE

Terminal No.	Wiring color	Condition	Specified
C5-1 – Body ground	W-B – Body ground	Always	Below 1 $\Omega$
C5-2 – Body ground	B-W – Body ground	Always	Below 1 $\Omega$
C5-3 – C5-2	G-R – B-W	Ignition switch ACC or ON and outside temperature 50°C (122°F) → -30°C (-22°F)	0.5 V → 4.3 V
		Ignition switch ACC or ON and outside temperature 25°C (77°F)	1.3 V
C5-4 – Body ground	R – Body ground	Ignition switch ACC or ON and INFO switch free → pressed	5 V → Below 1 V
		Ignition switch ACC or ON and MODE switch free → pressed	5 V → 2.5 V
C5-5 – Body ground	LG-R – Body ground	Ignition switch ON	Pulse generation
C5-7 – Body ground	L – Body ground	Engine idle speed	Pulse generation

## DIAGNOSTICS – COMBINATION METER

C5-9 – Body ground	B-R – Body ground	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
C5-10 – Body ground	W-B – Body ground	Always	4 to 7 V
C5-11 – Body ground	W-B – Body ground	Always	4 to 7 V
C5-12 – Body ground	W-B (*1) – Body ground	Always	Below 1 Ω
C5-13 – Body ground	R – Body ground	Ignition switch ON and passenger air bag OFF indicator light OFF → ON	10 to 14 V → Below 1 V
C5-14 – Body ground	L-Y – Body ground	Passenger side seat belt warning light flash → OFF	Below 1 V → 10 to 14 V
C5-15 – Body ground	V-W – Body ground	Ignition switch ON and turn front wheel slowly	Pulse generation (See wave form 1)
C5-16 – Body ground	G-Y – Body ground	Ignition switch ACC or ON	Pulse generation
C5-17 – Body ground	R-B – Body ground	Ignition switch ON and passenger air bag ON indicator light OFF → ON	10 to 14 V → Below 1 V
C5-18 – Body ground	G – Body ground	Tail light switch OFF → ON	Below 1 V → 10 to 14 V
C5-20 – Body ground	R-L – Body ground	Ignition switch OFF → ON	Below 1 V → 10 to 14 V
C5-22 – Body ground	GR – Body ground	Ignition switch OFF → ACC	Below 1 V → 10 to 14 V
C5-24 – Body ground	R – Body ground	Always	10 to 14 V

(\*1): 1MZ-FE



Wave form 1: Reference: Using oscilloscope:

Item	Condition
Tool setting	5 V/DIV, 20 ms/DIV
Vehicle condition	Driving at approx. 20 km/h (12 mph)

HINT:

As vehicle speed increases, the cycle of the signal wave form narrows.