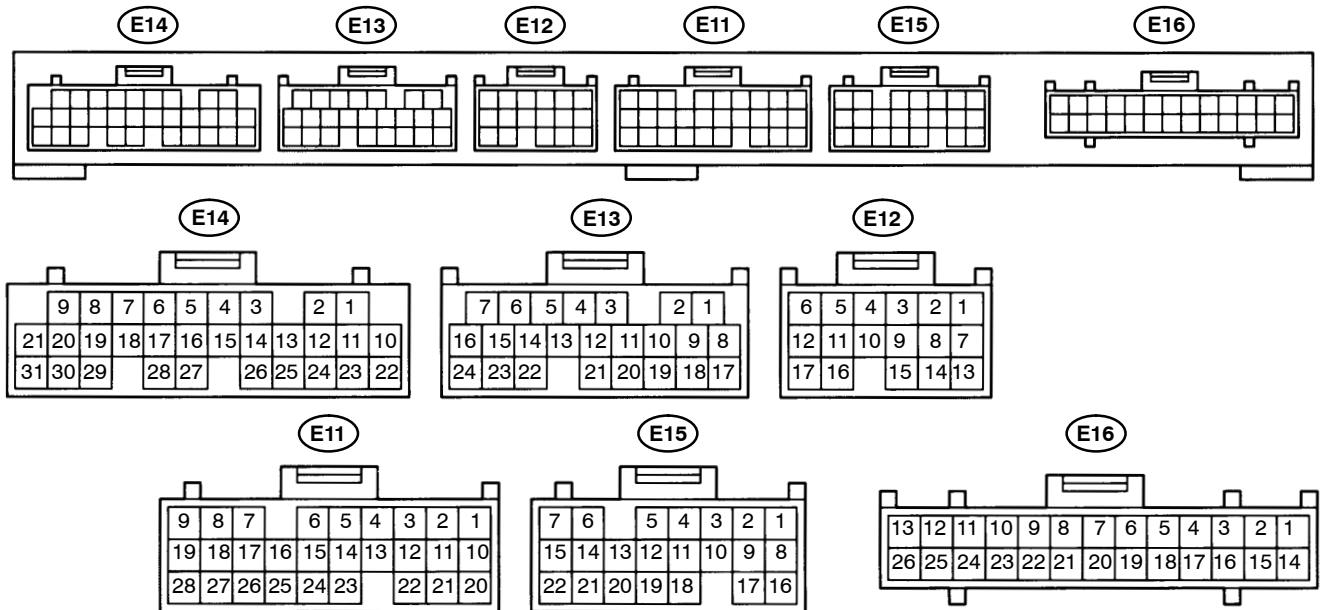


TERMINALS OF ECM

ECM Terminals



A01888

Symbols (Terminal No.)	Wiring Color	Condition	STD Voltage (V)
BATT (E15-1) - E1 (E13-17)	B-Y ↔ W-B	Always	9 - 14
+BM (E15-7) - E1 (E13-17)	L-Y ↔ W-B		
IGSW (E15-9) - E1 (E13-17)	B-O ↔ W-B	IG switch ON	9 - 14
+B (E15-16) - E1 (E13-17)	W ↔ W-B		
+B1 (E15-8) - E1 (E13-17)	W ↔ W-B		
VC (E13-2) - E2 (E13-18)	B-R ↔ BR	IG switch ON	4.5 - 5.5
VTA (E13-13) - E2 (E13-18)	P-L ↔ BR	IG switch ON, Accelerator pedal fully closed	0.4 - 1.0
		IG switch ON, Accelerator pedal fully open	3.2 - 4.8
VTA2 (E13-20) - E2 (E13-18)	B-L ↔ BR	IG switch ON, Accelerator pedal fully closed	2.0 - 2.9
		IG switch ON, Accelerator pedal fully open	4.6 - 5.1
VPA (E13-21) - E2 (E13-18)	P ↔ BR	IG switch ON, Accelerator pedal fully closed	0.3 - 0.9
		IG switch ON, Accelerator pedal fully open	3.2 - 4.8
VPA2 (E13-9) - E2 (E13-18)	R-B ↔ BR	IG switch ON, Accelerator pedal fully closed	1.8 - 2.7
		IG switch ON, Accelerator pedal fully open	4.7 - 5.1
VG (E13-10) - EVG (E13-19)	L-Y ↔ G-W	Idling, P or N position, A/C switch OFF	0.5 - 3.0
THA (E13-22) - E2 (E13-18)	Y-B ↔ BR	Idling, Intake air temp. 20°C (68°F)	0.5 - 3.4
THW (E13-14) - E2 (E13-18)	R-L ↔ BR	Idling, Engine coolant temp. 80°C (176°F)	0.2 - 1.0
STA (E11-17) - E1 (E13-17)	B ↔ W-B	Shift lever position P or N, Ignition switch START	6.0 or more
#1 (E13-5) - E01 (E14-21)	Y ↔ W-B	IG switch ON	9 - 14
#2 (E13-6) - E01 (E14-21)	B ↔ W-B		
#3 (E14-1) - E01 (E14-21)	L ↔ W-B	Idling	Pulse generation (See page DI-66)
#4 (E14-2) - E01 (E14-21)	R ↔ W-B		
#5 (E14-3) - E01 (E14-21)	G ↔ W-B		
#6 (E14-4) - E01 (E14-21)	R-L ↔ W-B		
#7 (E14-5) - E01 (E14-21)	W ↔ W-B		
#8 (E14-6) - E01 (E14-21)	B-W ↔ W-B		

IGT1 (E14-11) – E1 (E13-17) IGT2 (E14-12) – E1 (E13-17) IGT3 (E14-13) – E1 (E13-17) IGT4 (E14-14) – E1 (E13-17) IGT5 (E14-15) – E1 (E13-17) IGT6 (E14-16) – E1 (E13-17) IGT7 (E14-25) – E1 (E13-17) IGT8 (E14-26) – E1 (E13-17)	LG ↔ W-B B ↔ W-B L ↔ W-B R ↔ W-B G ↔ W-B R-L ↔ W-B Y-G ↔ W-B B-W ↔ W-B	Idling	Pulse generation (See page DI-130)
IGF1 (E14-27) – E1 (E13-17) IGF2 (E14-28) – E1 (E13-17)	Y-B ↔ W-B Y ↔ W-B	IG switch ON Idling	4.5 – 5.5 Pulse generation (See page DI-130)
G2 (E14-10) – NE- (E14-22) NE+ (E14-23) – NE- (E14-22)	Y ↔ W B ↔ W	Idling	Pulse generation (See page DI-75)
MREL (E15-10) – E1 (E13-17)	LG ↔ W-B	IG switch ON	9 – 14
FPR (E15-4) – E1 (E13-17)	G-R ↔ W-B	IG switch ON	0 – 3.0
FC (E15-5) – E1 (E13-17)	G-B ↔ W-B	IG switch ON	9 – 14
STP (E11-6) – E1 (E13-17)	L-B ↔ W-B	Brake pedal is depressed	7.5 – 14
		Brake pedal is released	Below 1.5
PRG (E13-7) – E1 (E13-17)	L-B ↔ W-B	IG switch ON	9 – 14
TBP (E11-10) – E1 (E13-17)	W-G ↔ W-B	IG switch ON	9 – 14
CCV (E16-12) – E1 (E13-17)	LG ↔ W-B	IG switch ON	9 – 14
PTNK (E11-22) – E2 (E13-18)	B-L ↔ BR	Ignition switch ON	2.9 – 3.7
		Apply vacuum 4.0 kPa (30 mmHg, 1.18 in.Hg)	Below 0.5
OXL1 (E13-12) – E1 (E13-17) OXR1 (E13-11) – E1 (E13-17)	B ↔ W-B W ↔ W-B	Maintain engine speed at 2,500 rpm for 90 sec. after warming up	Pulse generation (See page DI-51)
OXL2 (E11-18) – E1 (E13-17) OXR2 (E11-27) – E1 (E13-17)	G ↔ W-B Y ↔ W-B	Maintain engine speed at 2,500 rpm for 3 min. after warming up	Pulse generation (See page DI-60)
HTL (E13-4) – E1 (E13-17) HTL2 (E11-8) – E1 (E13-17) HTR (E13-3) – E1 (E13-17) HTR2 (E11-7) – E1 (E13-17)	R ↔ W-B R ↔ W-B Y ↔ W-B V-W ↔ W-B	Idling IG switch ON	Below 3.0 9 – 14
KNKL (E14-18) – E1 (E13-17)	B ↔ W-B	Maintain engine speed at 4,000 rpm after warming up	Pulse generation (See page DI-72)
KNKR (E14-17) – E1 (E13-17)	GR ↔ W-B		
TC (E11-5) – E1 (E13-17)	LG-B ↔ W-B	IG switch ON	9 – 14
W (E15-6) – E1 (E13-17)	Y-R ↔ W-B	Idling	9 – 14
		IG switch ON	Below 3.0
ACMG (E11-13) – E1 (E13-17)	W ↔ W-B	A/C switch ON (at idling)	Below 3.0
		A/C switch OFF	9 – 14
ENG+ (E15-14) – ENG- (E15-21) TRC+ (E15-13) – TRC- (E15-20)	BR ↔ Y L ↔ P	Idling	Pulse generation
VVL+ (E13-16) – VVL- (E13-24)	R ↔ G	Idling	Pulse generation (See page DI-137)
VVR+ (E13-15) – VVR- (E13-23)	Y ↔ L		
OCV+ (E14-20) – OCV- (E14-19)	L-W ↔ L-B	IG switch ON	Pulse generation (See page DI-140)
OCR+ (E11-19) – OCR- (E11-28)	L-W ↔ L		

DIAGNOSTICS – ENGINE

ACIS (E14-29) – E01 (E14-21)	W-L ↔ W-B	IG switch ON	9 – 14
		Engine speed between 2,500 rpm and 4,000 rpm	Below 3.0
CL+ (E13-12) – CL- (E13-8)	L-R ↔ G-B	Idling	Pulse generation (See page DI-120)
M+ (E14-8) – E1 (E13-17) M- (E14-7) – E1 (E13-17)	Y ↔ W-B L ↔ W-B	Idling	Pulse generation (See page DI-117)
ST1- (E16-14) – E1 (E13-17)	B-Y ↔ W-B	IG switch ON, Brake pedal is depressed	Below 1.5
		IG switch ON, Brake pedal is released	7.5 – 14
SIL (E15-11) – E1 (E13-17)	L ↔ W-B	During transmission	Pulse generation
SP2+ (E12-5) – SP2- (E12-11)	G ↔ R	Vehicle is driving	Pulse generation (See page DI-107)