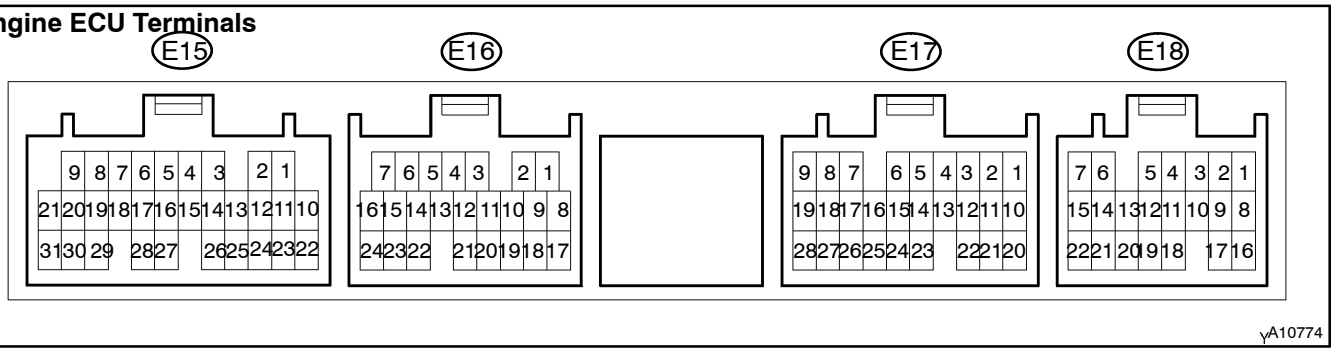
DI8FE–01

TERMINALS OF ECU

4Runner

Engine ECU Terminals



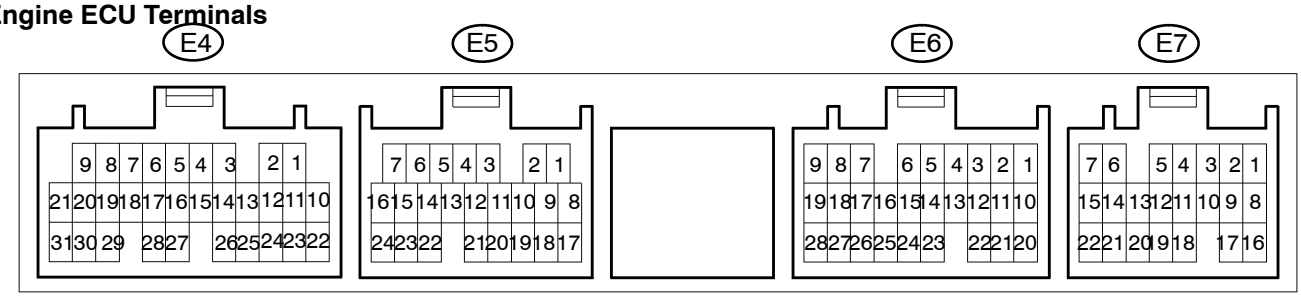
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Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
BATT (E18–2) – E1 (E15–22)	L–R – BR	Always	9 – 14
+ B (E18–9) – E1 (E15–22)	W–R – BR	IG switch ON	9 – 14
VC (E16–21) – E2 (E15–22)	L–B – R	IG switch ON	4.5 – 5.5
VCC (E17–8) – E2C (E17–27)	B–R – BR–B	IG switch ON	4.5 – 5.5
VA (E17–19) – E2C (E17–27)	Y–R – BR–B	Accelerator pedal fully closed	0.6 – 1.3
		Accelerator pedal fully opened	2.8 – 4.5
VAS (E17–28) – E2C (E17–27)	V–W – BR–B	Accelerator pedal fully closed	0.6 – 1.3
		Accelerator pedal fully opened	2.8 – 4.5
IDL (E17–18) – E2C (E17–27)	LG–R – BR–B	Accelerator pedal fully closed	9 – 14
		Accelerator pedal fully opened	0 – 3
PIM (E16–16) – E2 (E16–20)	B–Y – R	Apply vacuum 40 kPa (300 mmHg, 11.8 in.Hg)	1.0 – 1.8
		Apply vacuum 135 kPa (1,000 mmHg, 39.4 in.Hg)	2.3 – 4.2
THA (E16–22) – E2 (E16–20)	Y–G – R	Idling air intake temp. 0°C (32°F) to 60°C (140°F)	0.2 – 3.8
THW (E16–14) – E2 (E16–20)	G – R	Idling engine coolant temp. 60°C (140°F) to 120°C (248°F)	0.1 – 1.5
THF (E16–5) – E2 (E16–20)	W – R	IG switch ON (at engine cold)	0.5 – 3.8
STA (E17–24) – E1 (E15–22)	B–W – BR	Cranking	6.0 or more
TDC+ (E15–16) – TDC– (E15–27)	R – G	Idling	Pulse generation (See page DI–26)
NE+ (E15–17) – NE– (E15–28)	Y – L	Idling	Pulse generation (See page DI–26)
SP1 (E17–22) – E1 (E15–22)	G–O	IG switch ON Rotate driving wheel slowly	Pulse generation (See page DI–84)
TCV (E15–5) – E01 (E15–21)	G–W	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI–31)
MREL (E18–7) – E01 (E15–21)	L–Y – W–B	IG switch ON	9 – 14
IGSW (E18–9) – E1 (E15–21)	GR–B – BR	IG switch ON	9 – 14
AC (E17–4) – E1 (E15–22)	L–Y – BR	A/C switch ON (at idling)	0 – 1.5
		A/C switch OFF	9 – 14
ACT (E17–13) – E1 (E15–22)	L–B – BR	IG switch ON	9 – 14
		At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)	0 – 3
PDL (E17–9) – E1 (E15–22)	L–W – BR	Accelerator pedal fully closed	9 – 14
		Accelerator pedal fully opened	0 – 3

TACH (E17–2) – E1 (E15–22)	LG – BR	Idling	Pulse generation
TC (E18–18) – E1 (E15–22)	GR – BR	IG switch ON	9 – 14
W (E18–12) – E1 (E15–22)	R–W – BR	Check engine warning light lights up	0 – 3
		Except check engine warning light lights up	9 – 14
GIND (E18–3) – E1 (E15–22)	BR – BR	Glow indicator light lights up	0 – 3
		Except glow indicator light lights up	9 – 14
DATA (E16–13) – E1 (E15–22)	V – BR	For 0.5 sec. after IG switch ON	Pulse generation
CLK (E16–12) – E1 (E15–22)	P – BR	For 0.5 sec. after IG switch ON	Pulse generation
SIL (E18–19) – E1 (E18–22)	W – BR	Connect hand–held tester to DLC3	Pulse generation
IMI (E19–17) – E1 (E18–22)	L–B – BR	Idling	Pulse generation
IMO (E19–6) – E1 (E18–22)	L–R – BR	A few sec. after engine staring	Pulse generation

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Engine ECU Terminals

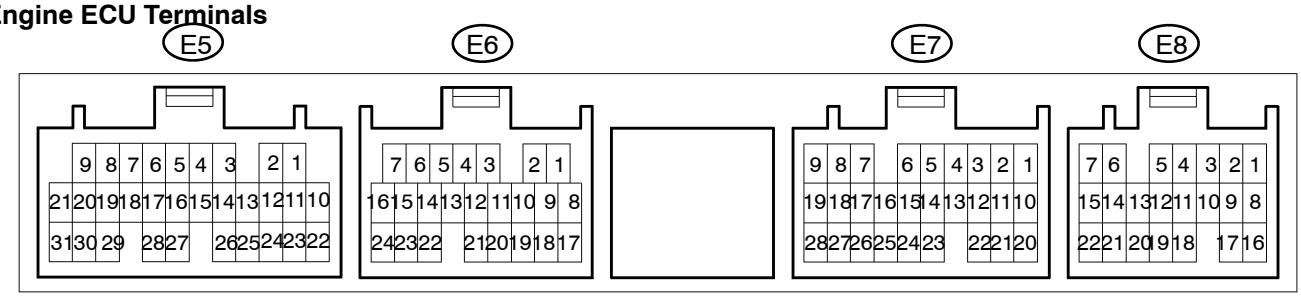


Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
BATT (E7–2) – E1 (E4–22)	Y – BR	Always	9 – 14
+ B (E7–9) – E1 (E4–22)	R–L – BR	IG switch ON	9 – 14
VC (E5–21) – E2 (E4–22)	B – G–R	IG switch ON	4.5 – 5.5
VCC (E6–8) – E2C (E6–27)	R–W – LG	IG switch ON	4.5 – 5.5
VA (E6–19) – E2C (E6–27)	B–L – LG	Accelerator pedal fully closed	0.6 – 1.3
		Accelerator pedal fully opened	2.8 – 4.5
VAS (E6–28) – E2C (E6–27)	P – LG	Accelerator pedal fully closed	0.6 – 1.3
		Accelerator pedal fully opened	2.8 – 4.5
IDL (E6–18) – E2C (E6–27)	B–R – LG	Accelerator pedal fully closed	9 – 14
		Accelerator pedal fully opened	0 – 3
PIM (E5–16) – E2 (E5–20)	B–Y – G–R	Apply vacuum 40 kPa (300 mmHg, 11.8 in.Hg)	1.0 – 1.8
		Apply vacuum 135 kPa (1,000 mmHg, 39.4 in.Hg)	2.3 – 4.2
THA (E5–22) – E2 (E5–20)	P–L – BR–W	Idling air intake temp. 0°C (32°F) to 60°C (140°F)	0.2 – 3.8
THW (E5–14) – E2 (E5–20)	P – BR–W	Idling engine coolant temp. 60°C (140°F) to 120°C (248°F)	0.1 – 1.5
THF (E5–5) – E2 (E5–20)	LG – B	IG switch ON (at engine cold)	0.5 – 3.8
STA (E6–24) – E1 (E4–22)	V–Y– BR	Cranking	6.0 or more
TDC+ (E4–16) – TDC– (E4–27)	R – G	Idling	Pulse generation (See page DI–26)
NE+ (E4–17) – NE– (E4–28)	W – B	Idling	Pulse generation (See page DI–26)
SP1 (E6–22) – E1 (E4–22)	G–O – BR	IG switch ON Rotate driving wheel slowly	Pulse generation
TCV (E4–5) – E01 (E5–21)	G–B – W–B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI–31)
EGR (E4–4) – E01 (E4–21)	G–W – W–B	IG switch ON	9 – 14
		EGR ON	Pulse generation (See page DI–109)
MREL (E7–7) – E01 (E4–21)	L–O – W–B	IG switch ON	9 – 14
IGSW (E7–9) – E1 (E4–21)	B–W – BR	IG switch ON	9 – 14
AC1 (E6–4) – E1 (E4–22)	Y – BR	A/C switch ON (at idling)	0 – 1.5
		A/C switch OFF	9 – 14
ACT (E6–13) – E1 (E4–22)	LG–R – BR	IG switch ON	9 – 14
		At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)	0 – 3

PDL (E6–9) – E1 (E4–22)	L – BR	Accelerator pedal fully closed	9 – 14
		Accelerator pedal fully opened	0 – 3
TAC (E6–2) – E1 (E4–22)	B – BR	Idling	Pulse generation
TC (E7–18) – E1 (E4–22)	V – BR	IG switch ON	9 – 14
W (E7–12) – E1 (E4–22)	P – BR	Check engine warning light lights up	0 – 3
		Except check engine warning light lights up	9 – 14
G–IND (E7–3) – E1 (E4–22)	R–W – BR	Glow indicator light lights up	0 – 3
		Except glow indicator light lights up	9 – 14
DATA (E5–13) – E1 (E4–22)	V – BR	For 0.5 sec. after IG switch ON	Pulse generation
CLK (E5–12) – E1 (E4–22)	P – BR	For 0.5 sec. after IG switch ON	Pulse generation
FSW (E6–7) – E1 (E4–22)	R–L – BR	At shift position in first position	9 – 14
		At other shift position in first position	0 – 3
SIL (E7–19) – E1 (E4–22)	V–W – BR	Connect hand–held tester to DLC3	Pulse generation
IMI (E7–17) – E1 (E4–22)	L–B – BR	Idling	Pulse generation
IMO (E7–6) – E1 (E4–22)	L–R – BR	A few sec. after engine staring	Pulse generation

Land Cruiser/Land Cruiser Prado

Engine ECU Terminals



Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
BATT (E8–2) – E1 (E5–22)	B–R – BR	Always	9 – 14
+ B (E8–9) – E1 (E5–22)	B–Y – BR	IG switch ON	9 – 14
VC (E6–21) – E2 (E5–22)	L–R – BR–W	IG switch ON	4.5 – 5.5
VCC (E7–8) – E2C (E7–27)	L–R – BR–W	IG switch ON	4.5 – 5.5
VA (E7–19) – E2C (E7–27)	R–Y – BR–W	Accelerator pedal fully closed	0.6 – 1.3
		Accelerator pedal fully opened	2.8 – 4.5
VAS (E7–28) – E2C (E7–27)	P–L – BR–W	Accelerator pedal fully closed	0.6 – 1.3
		Accelerator pedal fully opened	2.8 – 4.5
IDL (E7–18) – E2C (E7–27)	LG–B – BR–W	Accelerator pedal fully closed	9 – 14
		Accelerator pedal fully opened	0 – 3
PIM (E6–16) – E2 (E6–20)	P–L – BR–W	Apply vacuum 40 kPa (300 mmHg, 11.8 in.Hg)	1.0 – 1.8
		Apply vacuum 135 kPa (1,000 mmHg, 39.4 in.Hg)	2.3 – 4.2
THA (E6–22) – E2 (E6–20)	W–G – BR–W	Idling Air intake temp. 0°C (32°F) to 60°C (140°F)	0.2 – 3.8
THW (E6–14) – E2 (E6–20)	G–B – BR–W	Idling Engine coolant temp. 60°C (140°F) to 120°C (248°F)	0.1 – 1.5
THF (E6–5) – E2 (E6–20)	B–R – BR–W	IG switch ON (at engine cold)	0.5 – 3.8
STA (E7–24) – E1 (E5–22)	B–W – BR	Cranking	6.0 or more
TDC+ (E5–16) – TDC– (E5–27)	B – W	Idling	Pulse generation (See page DI–26)
NE+ (E5–17) – NE– (E5–28)	L – G	Idling	Pulse generation (See page DI–26)
SP1 (E7–22) – E1 (E5–22)	V – BR	IG switch ON Rotate driving wheel slowly	Pulse generation
TCV (E5–5) – E01 (E5–21)	R–Y – W–B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI–31)
EGR (E7 – 24) – E01 (E7–13)	R–G – W–B	EGR ON	Pulse generation (See page DI–109)
S/TH (E7–10) – E01 (E7–13)	W–L – W–B	VSV OFF at idling	9 – 14
		VSV ON (after IG switch OFF for 2 sec.)	0 – 3
PA (E7–9) – E01 (E7–13)	W–R – W–B	VSV for atmospheric pressure leaning OFF	9 – 14
		VSV for atmospheric pressure leaning ON	0 – 3
MREL (E8–7) – E01 (E5–21)	B–W – W–B	IG switch ON	9 – 14
IGSW (E1–9) – E1 (E5–21)	B–R – BR	IG switch ON	9 – 14
AC (E7–4) – E1 (E5–22)	W–G – BR	A/C switch ON at idling	0 – 1.5
		A/C switch OFF	9 – 14

ACT (E7–13) – E1 (E5–22)	L–B – BR	IG switch ON	9 – 14
		At A/C cut controlled (Driving below 30 km/h, accelerator pedal fully opened for 5 sec.)	0 – 3
PDL (E7–9) – E1 (E5–22)	GR – BR	Accelerator pedal fully closed	9 – 14
		Accelerator pedal fully opened	0 – 3
TAC (E7–2) – E1 (E5–22)	B – BR	Idling	Pulse generation
TC (E8–18) – E1 (E5–22)	P–B – BR	IG switch ON	9 – 14
W (E8–12) – E1 (E5–22)	W – BR	Check engine warning light lights up	0 – 3
		Except check engine warning light lights up	9 – 14
G–IND (E8–3) – E1 (E5–22)	Y–R – BR	Glow indicator light lights up	0 – 3
		Except glow indicator light lights up	9 – 14
DATA (E6–13) – E1 (E5–22)	G–B – BR	For 0.5 sec. after IG switch ON	Pulse generation
CLK (E6–12) – E1 (E5–22)	G–W – BR	For 0.5 sec. after IG switch ON	Pulse generation
EGRC (E7–3) – E1 (E5–22)	R – BR	IG switch ON	0 – 3
		Maintain engine speed at 1500 rpm after warming up	9 – 14
IREL (E9–2) – E1 (E5–22)	G–Y – BR	IG switch ON	0 – 3
		At intake heater ON	9 – 14
VCH (E7–23) – E1 (E5–22)	Y–R – BR	Heater blower switch ON	0 – 3
		Heater blower switch OFF	9 – 14
SVR (E9–13) – E1 (E5–22)	L–W – BR	IG switch ON	0 – 1.5
VCT (E6–7) – E1 (E5–22)	L–B – BR	Heater blower switch ON	0 – 3
		Heater blower switch OFF	9 – 14
HSW (E9–20) – E1 (E5–22)	B–L – BR	Push on power heater switch	0 – 3
		Push off power heater switch	9 – 14
FSW (E7–7) – E1 (E5–22)	R–L – BR	At shift position in first position	9 – 14
		At other shift position in first position	0 – 3
PS (E7–9) – E1 (E8–22)	P – BR	Idling Turn steering wheel	0 – 3
		IG switch ON	9 – 14
SIL (E8–19) – E1 (E8–22)	V–W – BR	Connect hand–held tester to DLC3	Pulse generation
IMI (E9–17) – E1 (E8–22)	L–B – BR	Idling	Pulse generation
IMO (E9–6) – E1 (E8–22)	L–R – BR	A few sec. after engine staring	Pulse generation