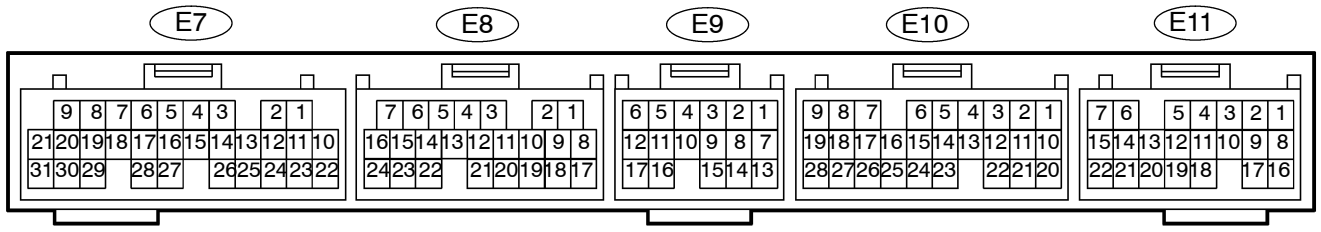
DI3QY–01

TERMINALS OF ECU

2UZ–FE:
Engine and ECT ECU Terminals

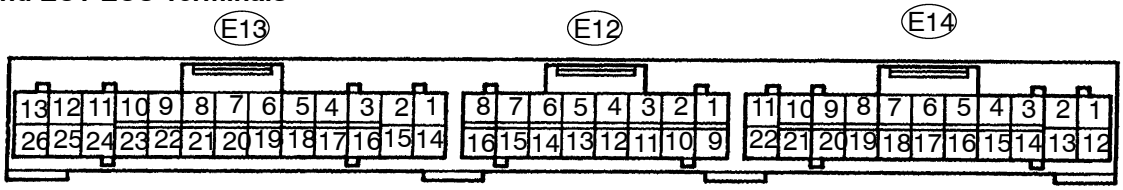


D01639

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
SPD – E1 (E10, 15 – E8, 17)	V ↔ BR	IG ON and Vehicle stationary	Below 1.5
		IG ON and Turn one rear wheel slowly	Pulse signal is output Below 1.5 ↔ 4 – 6
OIL – E2 (E9, 18 – E8, 18)	G–Y ↔ BR–W	ATF temperature: 115°C (239°F) or more	Below 1.5
S1 – E1 (E9, 1 – E8, 17)	R ↔ BR	IG ON	9.0 – 14
		1st or 2nd gear	9.0 – 14
		3rd or O/D gear	Below 1.5
S2 – E1 (E9, 2 – E8, 17)	W ↔ BR	IG ON	Below 1.5
		2nd or 3rd gear	9.0 – 14
		1st or O/D gear	Below 1.5
SL – E1 (E9, 3 – E8, 17)	G ↔ BR	IG ON	Below 1.5
		Vehicle driving under lock–up position	9.0 – 14
$SP2^+$ – $SP2^-$ (E9, 5 – E9, 11)	R ↔ G	Engine is running	Pulse signal is output Below 1.5 ↔ 4 – 6
OIL2 – E2 (E9, 16 – E8, 18)	L ↔ BR–W	ATF temperature: 115°C (239°F) or more	Below 1.5
ST – E1 (E9, 6 – E8, 17)	G–R ↔ BR	IG ON	Below 1.5
L – E1 (E10, 4 – E8, 17)	G–B ↔ BR	IG ON and Shift lever L range	9.0 – 14
		IG ON and Shift lever other than L range	Below 1.5
2 – E1 (E10, 3 – E8, 17)	G ↔ BR	IG ON and Shift lever 2 range	9.0 – 14
		IG ON and Shift lever other than 2 range	Below 1.5
D – E1 (E10, 19 – E8, 17)	G–Y ↔ BR	IG ON and Shift lever D range	9.0 – 14
		IG ON and Shift lever other than D range	Below 1.5
R – E1 (E10, 2 – E8, 17)	R–B ↔ BR	IG ON and Shift lever R range	9.0 – 14
		IG ON and Shift lever other than R range	Below 1.5
NSW – E1 (E10, 20 – E8, 17)	B–W ↔ BR	IG ON and Shift lever P or N range	Below 1.5
		IG ON and Shift lever other than P or N range	9.0 – 14
STP – E1 (E10, 6 – E8, 17)	G–W ↔ BR	IG ON and Brake pedal is depressed	7.5 – 14
		IG ON and Brake pedal is released	Below 1.5
OD2 – E1 (E10, 1 – E8, 17)	B ↔ BR	O/D main switch ON (O/D OFF)	Below 3
		O/D main switch OFF (O/D ON)	9.0 – 14
PWR – E1 (E10, 11 – E8, 17)	L–W ↔ BR	IG ON and Pattern select switch ”NORM”	9.0 – 14
		IG ON and Pattern select switch ”PWR”	Below 1.5
SNWI – E1 (E13, 22 – E8, 17)	L–R ↔ BR	IG ON and 2nd start switch ON	Below 1.5
		IG ON and 2nd start switch OFF	9.0 – 14

SNWL – E1 (E13, 21 – E8, 17)	Y ↔ BR	IG ON and 2nd start mode	Below 1.5
		IG ON and Except 2nd start mode	7.5 – 14
TFN – E1 (E11, 15 – E8, 17)	Y–G ↔ BR	IG ON and Transfer shift lever N position	Below 1.5
		IG ON and Transfer shift lever other than N position	9.0 – 14
L4 – E1 (E11, 22 – E8, 17)	B–L ↔ BR	IG ON and Transfer shift lever L4 position	9.0 – 14
		IG ON and Transfer shift lever other than L4 position	Below 1.5
SLT^{+}–SLT^{-} (E4, 11 – E4, 9)	G–W ↔ G–B	IG ON	Below 1.5
		Engine is idling	Pulse signal is output Below 1.5 ↔ 9.0 – 14

1FZ–FE:
Engine and ECT ECU Terminals

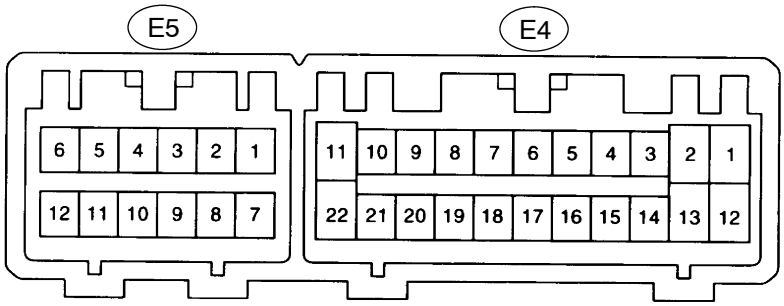


P19559

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
S1 – E1 (E13, 2 – E13, 14)	R ↔ BR	IG ON	9.0 – 14
		1st or 2nd gear	9.0 – 14
		3rd or O/D gear	Below 1.5
S2 – E1 (E13, 15 – E13, 14)	W ↔ BR	IG ON	Below 1.5
		2nd or 3rd gear	9.0 – 14
		1st or O/D gear	Below 1.5
SL – E1 (E13, 1 – E13, 14)	G ↔ BR	IG ON	Below 1.5
		Vehicle driving under lock–up position	9.0 – 14
$SP2^+$ – $SP2^-$ (E12, 6 – E12, 14)	R ↔ G	Engine is running	Pulse signal is output Below 1.5 ↔ 4 – 6
OD2 – E1 (E14, 20 – E12, 14)	B ↔ BR	O/D main switch ON (O/D OFF)	Below 1.5
		O/D main switch OFF (O/D ON)	9.0 – 14
L – E1 (E14, 6 – E13, 14)	G–B ↔ BR	IG ON and Shift lever L range	9.0 – 14
		IG ON and Shift lever other than L range	Below 1.5
2 – E1 (E14, 17 – E13, 14)	G ↔ BR	IG ON and Shift lever 2 range	9.0 – 14
		IG ON and Shift lever other than 2 range	Below 1.5
R – E1 (E14, 16 – E13, 16)	R–B ↔ BR	IG ON and Shift lever R range	9.0 – 14
		IG ON and Shift lever other than R range	Below 1.5
NSW – E1 (E14, 22 – E13, 14)	B–W ↔ BR	IG ON and Shift lever P or N range	Below 1.5
		IG ON and Shift lever other than P or N range	9.0 – 14
TFN – E1 (E12, 16 – E13, 14)	Y–G ↔ BR	IG ON and Transfer shift lever N position	Below 1.5
		IG ON and Transfer shift lever other than N position	9.0 – 14
SNWI – E1 (E13, 22 – E13, 14)	L–R ↔ BR	IG ON and 2nd start switch ON	9.0 – 14
		IG ON and 2nd start switch OFF	Below 1.5
SNWL – E1 (E13, 21 – E13, 14)	Y ↔ BR	IG ON and 2nd start mode	Below 1.5
		IG ON and Except 2nd start mode	7.5 – 14
PWR – E1 (E14, 3 – E13, 14)	L–W ↔ BR	IG ON and Pattern select switch ”NORM”	Below 1.5
		IG ON and Pattern select switch ”PWR”	9.0 – 14
SPD – E1 (E14, 9 – E13, 14)	V ↔ BR	IG ON and vehicle stationary	Below 1.5 V
		IG ON and turn one rear wheel only	Pulse signal is output Below 1.5 ↔ 4 – 6
L4 – E1 (E13, 9 – E13, 14)	B–L ↔ BR	IG ON and Transfer shift lever L4 position	9.0 – 14
		IG ON and Transfer shift lever other than L4 position	Below 1.5
ST – E1 (E13, 7 – E13, 14)	G–R ↔ BR	IG ON	Below 1.5

STP – E1 (E14, 2 – E13, 14)	G–W ↔ BR	IG ON and Brake pedal is depressed	7.5 – 14
		IG ON and Brake pedal is released	Below 1.5

1HZ, 1HD–T:
ECT ECU Terminal

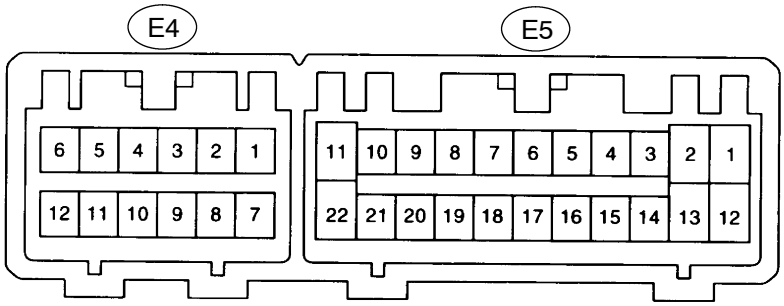


Q11246

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
VC – GND (E4, 6 – E5, 8)	LG–R ↔ BR–W	IG ON	4 – 6
VA – GND (E4, 7 – E5, 8)	W–L ↔ BR–W	IG ON and throttle valve fully closed	2.0 – 3.2
		IG ON and throttle valve fully open	0.5 – 0.7
NE^+ – NE^- (E4, 5 – E4, 16)	L ↔ BR–W	Engine is running	Pulse signal output
SP1 – GND (E4, 8 – E5, 8)	V ↔ BR–W	IG ON and Vehicle stationary	Below 3.0
		IG ON and Turn one rear wheel slowly	Pulse signal is output Below 1.5 ↔ 4 – 6
S1 – GND (E5, 1 – E5, 8)	R ↔ BR–W	IG ON	9.0 – 14
		1st or 2nd gear	9.0 – 14
		3rd or O/D gear	Below 1.5
S2 – GND (E4, 11 – E5, 8)	W ↔ BR–W	IG ON	Below 1.5
		2nd or 3rd gear	9.0 – 14
		1st or O/D gear	Below 1.5
SL – GND (E5, 4 – E5, 8)	G ↔ BR–W	IG ON	Below 1.5
		Vehicle driving under lock–up position	9.0 – 14
$SP2^+$ – $SP2^-$ (E4, 4 – E4, 15)	R ↔ G	Engine is running	Pulse signal is output Below 1.5 ↔ 4 – 6
ST – GND (E5, 6 – E5, 8)	G–R ↔ BR–W	IG ON	Below 1.5
L – GND (E4, 20 – E5, 8)	G–B ↔ BR–W	IG ON and Shift lever L range	9.0 – 14
		IG ON and Shift lever other than L range	Below 1.5
2 – GND (E4, 9 – E5, 8)	G ↔ BR–W	IG ON and Shift lever 2 range	9.0 – 14
		IG ON and Shift lever other than 2 range	Below 1.5
R – GND (E4, 22 – E5, 8)	R–B ↔ BR–W	IG ON and Shift lever R range	9.0 – 14
		IG ON and Shift lever other than R range	Below 1.5
P – GND (E4, 10 – E5, 8)	G–W ↔ BR–W	IG ON and Shift lever P range	9.0 – 14
		IG ON and Shift lever other than P range	Below 1.5
N – GND (E4, 21 – E5, 8)	G–R ↔ BR–W	IG ON and Shift lever P or N range	9.0 – 14
		IG ON and Shift lever other than N range	Below 1.5
OD2 – GND (E5, 1 – E5, 8)	B ↔ BR–W	O/D main switch ON (O/D OFF)	Below 1.5
		O/D main switch OFF (O/D ON)	9.0 – 14
PWR – GND (E5, 14 – E5, 8)	L–W ↔ BR–W	IG ON and Pattern select switch ”PWR”	Below 1.5
		IG ON and Pattern select switch ”NORM”	9.0 – 14
SNWO – GND (E5, 3 – E5, 8)	Y ↔ W	IG ON and 2nd start switch ON	9.0 – 14
		IG ON and 2nd start switch OFF	Below 1.5
SNWI – GND (E4, 2 – E5, 8)	L–R ↔ BR–W	IG ON and 2nd start mode	Below 1.5
		IG ON and Except 2nd start mode	9.0 – 14

TSW – GND (E4, 2 – E5, 8)	LG ↔ BR–W	Engine coolant temperature 55 °C (131 °F) or more	Below 1.5
		Engine coolant temperature 43 °C (109 °F) less than	9.0 – 14
TFN – GND (E4, 9 – E5, 8)	G–W ↔ BR–W	IG ON and Transfer shift lever N position	Below 1.5
		IG ON and Transfer shift lever other than N position	9.0 – 14
L4 – GND (E5, 19 – E5, 8)	B–L ↔ BR–W	IG ON and Transfer shift lever L4 position	9.0 – 14
		IG ON and Transfer shift lever other than L4 position	Below 1.5
+B – GND (E4, 10 – E5, 8)	L–W ↔ BR–W	Every time	9.0 – 14
DG – GND (E5, 12 – E5, 8)	G–O ↔ BR–W	IG ON and throttle valve fully closed	Below 1.5
		IG ON and throttle valve fully open	0 → 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8

1HD–FTE:
ECT ECU Terminal



Q11246

Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
ECT^{+} – GND (E5, 6 – E4, 8)	Y ↔ W–B	IG ON and vehicle running	Pulse signal output
ECT^{-} – GND (E5, 17 – E4, 8)	L ↔ W–B	IG ON and vehicle running	Pulse signal output
SP1 – GND (E4, 5 – E4, 8)	V ↔ W–B	IG ON and Vehicle stationary	Below 3
		IG ON and Turn one rear wheel slowly	Pulse signal is output Below 1.5 ↔ 4 – 6
OIL2 – GND (E5, 16 – E4, 8)	L ↔ W–B	ATF temperature: 115°C (239°F) or more	Below 1.5
S1 – GND (E4, 4 – E4, 8)	R ↔ W–B	IG ON	9.0 – 14
		1st or 2nd gear	9.0 – 14
		3rd or O/D gear	Below 1.5
S2 – GND (E4, 11 – E4, 8)	W ↔ W–B	IG ON	Below 1.5
		2nd or 3rd gear	9.0 – 14
		1st or O/D gear	Below 1.5
SL – GND (E4, 5 – E4, 5)	G ↔ W–B	IG ON	Below 1.5
		Vehicle driving under lock–up position	9.0 – 14
$SP2^{+}$ – $SP2^{-}$ (E5, 4 – E5, 15)	R ↔ G	Engine is running	Pulse signal is output Below 1.5 ↔ 4 – 6
ST – GND (E4, 6 – E4, 5)	G–R ↔ W–B	IG ON	Below 1.5
L – GND (E5, 20 – E4, 5)	G–B ↔ W–B	IG ON and Shift lever L range	9.0 – 14
		IG ON and Shift lever other than L range	Below 1.5
2 – GND (E5, 9 – E4, 5)	G ↔ W–B	IG ON and Shift lever 2 range	9.0 – 14
		IG ON and Shift lever other than 2 range	Below 1.5

R – GND (E5, 11 – E4, 8)	R–B ↔ W–B	IG ON and Shift lever R range	9.0 – 14
		IG ON and Shift lever other than R range	Below 1.5
P – GND (E5, 10 – E4, 8)	G–W ↔ W–B	IG ON and Shift lever P range	9.0 – 14
		IG ON and Shift lever other than P range	Below 1.5
N – GND (E5, 21 – E4, 8)	G–R ↔ W–B	IG ON and Shift lever P or N range	9.0 – 14
		IG ON and Shift lever other than N range	Below 1.5
OD2 – GND (E5, 1 – E4, 8)	B ↔ W–B	O/D main switch ON (O/D OFF)	Below 1.5
		O/D main switch OFF (O/D ON)	9.0 – 14
PWR – GND (E5, 19 – E4, 8)	L–W ↔ W–B	IG ON and Pattern select switch ”PWR”	Below 1.5
		IG ON and Pattern select switch ”NORM”	9.0 – 14
SNWO – GND (E5, 13 – E4, 8)	Y ↔ W–B	IG ON and 2nd start switch ON	9.0 – 14
		IG ON and 2nd start switch OFF	Below 1.5
SNWI – GND (E5, 8 – E4, 8)	L–R ↔ W–B	IG ON and 2nd start mode	Below 1.5
		IG ON and Except 2nd start mode	9.0 – 14
TFN – GND (E4, 2 – E4, 8)	Y–G ↔ W–B	IG ON and Transfer shift lever N position	Below 1.5
		IG ON and Transfer shift lever other than N position	9.0 – 14
L4 – GND (E4, 9 – E4, 8)	B–L ↔ W–B	IG ON and Transfer shift lever L4 position	9.0 – 14
		IG ON and Transfer shift lever other than L4 position	Below 1.5
+B – GND (E4, 10 – E4, 8)	Y–G ↔ W–B	Every time	9.0 – 14
DG – GND (E5, 12 – E4, 8)	Y–G ↔ BR–B	IG ON and throttle valve fully closed	Below 1.5
		IG ON and throttle valve fully open	0 → 1 → 2 → 3 → 4 → 5 → 6 → 7 → 8
SLT^{+} – SLT^{-} (E4, 11 – E4, 9)	G–W ↔ G–B	IG ON	Below 1.5
		Engine is idling	Pulse signal is output Below 3 ↔ 9.0 – 14