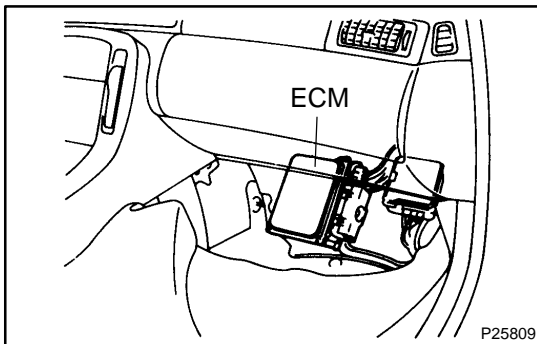


TERMINALS OF ECM

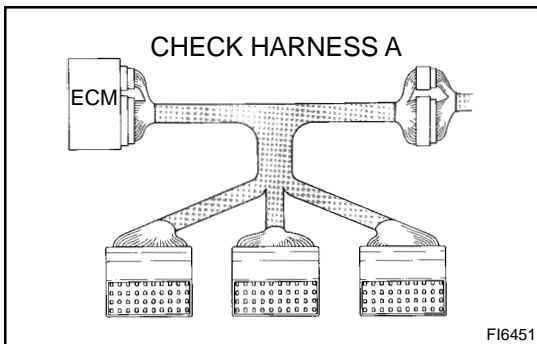
1. STANDARD VALUE OF ECM TERMINALS

- Connectors of the ECM are water-proof and are the bolt type. For water proof type connectors, in order to measure the voltage of ECM terminals and the resistance of connected parts, connect the inspection sub wire harness between the ECM and vehicle wire harness, then perform the inspection.
- The inspection method of inserting a tester probe from the other side of connector noticeably reduces the water-proof ability.
- Disconnect the connector by fully loosening the bolt.



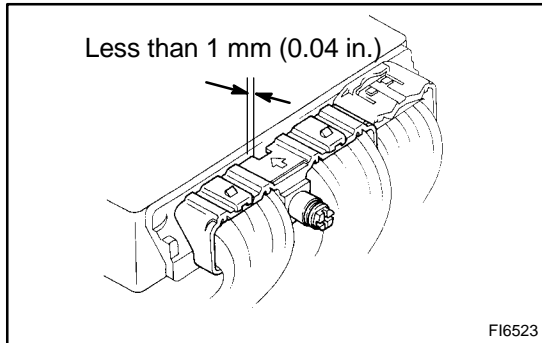
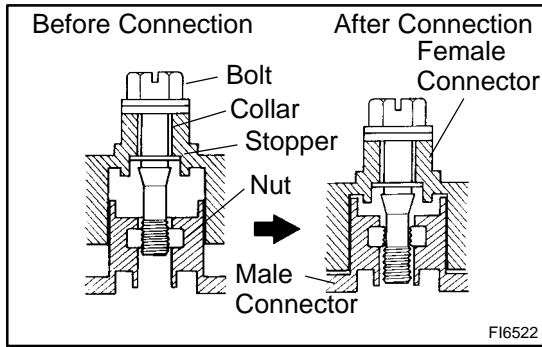
2. PREPARATION

- Turn the ignition switch to LOCK position.
 - Turn up the passenger side floor mat.
 - Remove the ECM protector.
 - Disconnect the connectors from the ECM.
- After completely loosening the bolt, the 2 parts of connector can be separated.



NOTICE:

- Do not pull the wire harness when disconnecting the connector.
- When disconnecting the connector, the ECM's back-up power source is cut off, so the DTC, etc. recorded in the ECM memory are cancelled.
- Never insert a tester probe or male terminal used for inspection purposes into the female terminal of the vehicle wire harness. Otherwise, the female terminal may be widened, which can result in faulty connection.

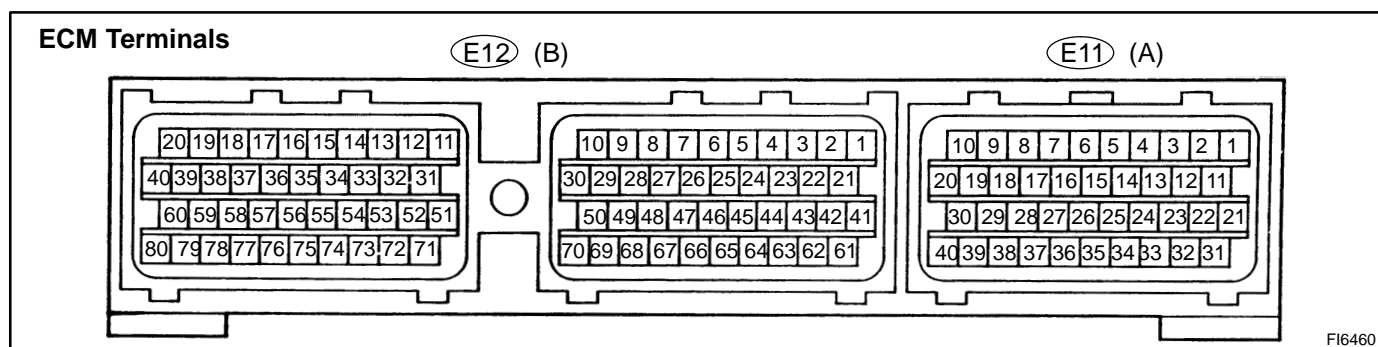


- (e) Connect the Check harness A between ECM and connector of vehicle wire harness.
SST 09990-01000

HINT:

The arrangement of the DLC1 terminals are the same as those of the ECM (See page [DI-166](#)).

- (f) Disconnect check harness A.
(g) Reconnect the connectors to the ECM.
 (1) Match the male connector correctly with female connector, then press them together.
 (2) Tighten the bolt.
 Make sure the connector is completely connected, by tightening the bolt until there is a clearance of less than 1 mm (0.04 in.) between bottom of the male connector and end of the female connector.
(h) Install the ECM protector and floor mat.



Symbols (Terminals No.)	Wiring Color	Condition	STD Voltage (V)
BATT (A33) – E1 (B69)	B–W ↔ W–R	Always	9 – 14
IGSW (A1) – E1 (B69)	B–O ↔ W–R	IG switch ON	9 – 14
+B (A31) – E1 (B69)	B–R ↔ W–R	IG switch ON	9 – 14
VC (B41) – E2 (B65)	L–R ↔ BR	IG switch ON	4.5 – 5.5
IDL1 (B64) – E2 (B65)	R ↔ BR	IG switch ON and apply vacuum to the throttle opener Throttle valve fully closed.	0 – 3.0
		IG switch ON • Throttle valve fully open.	9 – 14
IDL2 (B63) – E2 (B65)	R–B ↔ BR	IG switch ON Sub throttle valve fully closed.	0 – 3.0
		IG switch ON • Sub throttle valve fully open.	9 – 14
VTA1 (B43) – E2 (B65)	Y ↔ BR	IG switch ON • Throttle valve fully closed.	0.3 – 0.8
		IG switch ON • Throttle valve fully open.	3.2 – 4.9
VTA2 (B42) – E2 (B65)	YR ↔ BR	IG switch ON • Throttle valve fully closed.	0.3 – 0.8
		IG switch ON • Throttle valve fully open.	3.2 – 4.9
VG (B66) – EVG (B70)	L–W ↔ G–W	Idling, P or N Position, A/C switch OFF	1.1 – 1.5
THA (B45) – E2 (B65)	Y–G ↔ BR	Idling, Intake air temp. 20°C (68°F)	0.5 – 3.4
THW (B44) – E2 (B65)	LG ↔ BR	Idling, Engine coolant temp. 80°C (176°F)	0.2 – 1.0
STA (B77) – E1 (B69)	G–R ↔ W–R	Cranking	6.0 or more
#10 (B20) – E01 (B80)	Y ↔ W–B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
#20 (B19) – E01 (B80)	R ↔ W–B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
#30 (B18) – E01 (B80)	B ↔ W–B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
#40 (B17) – E01 (B80)	B–R ↔ W–B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)

DIAGNOSTICS – ENGINE (1UZ-FE)

#50 (B16) – E01 (B80)	W-L ↔ W-B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
#60 (B15) – E01 (B80)	R-W ↔ W-B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
#70 (B40) – E01 (B80)	L-R ↔ W-B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
#80 (B39) – E01 (B80)	G ↔ W-B	IG switch ON	9 – 14
		Idling	Pulse generation (See page DI-206)
IGT1 (B57) – E1 (B69)	W ↔ W-R	Idling	Pulse generation (See page DI-267)
IGT2 (B56) – E1 (B69)	BR ↔ W-R	Idling	Pulse generation (See page DI-267)
IGF1 (B58) – E1 (B69)	G ↔ W-R	IG switch ON	Below 2.0
		Idling	Pulse generation (See page DI-267)
IGF2 (B59) – E1 (B69)	Y ↔ W-R	IG switch ON	Below 2.0
		Idling	Pulse generation (See page DI-267)
G1 (B26) – G1 ⊖ (B6)	BR ↔ W	Idling	Pulse generation (See page DI-215)
G2 (B25) – G2 ⊖ (B5)	G ↔ R	Idling	Pulse generation (See page DI-215)
NE (B27) – NE ⊖ (B7)	Y ↔ R	Idling	Pulse generation (See page DI-215)
M-REL (A24) – E1 (B69)	B-Y ↔ W-R	IG switch ON	9 – 14
FPC (A22) – E1 (B69)	R-W ↔ W-R	IG switch ON	Below 1.5
		Idling	Pulse generation (0 and 4.5 – 5.5)
DI (A21) – E1 (B69)	P ↔ W-R	Idling	7.0 or more
PR (B71) – E1 (B69)	R-L ↔ W-R	IG switch ON	9 – 14
		Restarting at high engine coolant temp.	Below 2.0
PRG (B51) – E1 (B69)	G-W ↔ W-R	Idling	9 – 14
TPC (A29) – E1 (B69)	L-Y ↔ W-R	Ignition switch ON	9 – 14
PTNK (A30) – E2 (B65)	R ↔ BR	Ignition switch ON	2.9 – 3.7
		Apply vacuum 4.0 kPa (30mmHg, 1.2 in. Hg)	Below 0.5
OIL (B24) – E2 (B65)	L ↔ BR	A/T oil temp. 80°C (176°F)	0.2 – 1.0
ISC1 (B35) – E1 (B69)	P ↔ W-R	IG switch ON	9 – 14
ISC2 (B34) – E1 (B69)	Y-G ↔ W-R	IG switch ON	9 – 14
ISC3 (B33) – E1 (B69)	G-Y ↔ W-R	IG switch ON	9 – 14
ISC4 (B32) – E1 (B69)	L-W ↔ W-R	IG switch ON	9 – 14
OXR1 (B47) – E1 (B69)	B ↔ W-R	Maintain engine speed at 2,500 rpm for 2 minutes after warning up.	Pulse generation
OXL1 (B48) – E1 (B69)	W ↔ W-R	Maintain engine speed at 2,500 rpm for 2 minutes after warning up.	Pulse generation

HTR1 (B73) – E01 (B80)	R–W ↔ W–B	Idling	Below 3.0
		IG switch ON	9 – 14
HTL1 (B72) – E01 (B80)	L ↔ W–B	Idling	Below 3.0
		IG switch ON	9 – 14
HTR2 (B75) – E01 (B80)	R ↔ B–W	Idling	Below 3.0
		IG switch ON	9 – 14
HTL2 (B74) – E01 (B80)	BR–W ↔ W–B	Idling	Below 3.0
		IG switch ON	9 – 14
EGR1 (B55) – E1 (B69)	B–W ↔ W–R	IG switch ON	9 – 14
EGR2 (B54) – E1 (B69)	B–Y ↔ W–R	IG switch ON	9 – 14
EGR3 (B53) – E1 (B69)	W–R ↔ W–R	IG switch ON	9 – 14
EGR4 (B52) – E1 (B69)	W–G ↔ W–R	IG switch ON	9 – 14
THG (B46) – E2 (B65)	B–R ↔ BR	IG switch ON	4.5 – 5.5
KNK1 (B50) – E1 (B69)	W ↔ W–R	Idling	Pulse generation (See page DI-215)
KNK2 (B49) – E1 (B69)	W ↔ W–R	Idling	Pulse generation (See page DI-215)
NSW (B76) – E1 (B69)	B–W ↔ W–R	IG switch ON Other shift position "P" or "N" position	9 – 14
		IG switch ON Shift position "P" or "N" position	0 – 3.0
SPD (A2) – E1 (B69)	O ↔ W–R	IG switch ON Rotate driving wheel slowly	Pulse generation (See page DI-253)
TE1 (A20) – E1 (B69)	LG ↔ W–R	IG switch ON	9 – 14
W (A6) – E1 (B69)	L–Y ↔ W–R	Idling	9 – 14
		IG switch ON	Below 3.0
OD1 (A12) – E1 (B69)	BR–Y ↔ W–R	IG switch ON	9 – 14
A/C (A34) – E1 (B69)	L–R ↔ W–R	A/C switch ON (At idling)	0 – 1.5
		A/C switch OFF	9 – 14
ACMG (A23) – E1 (B69)	W ↔ W–R	A/C switch ON (At idling)	0 – 1.5
		A/C switch OFF	9 – 14
NEO (A38) – E1 (B69)	PL ↔ W–R	IG switch ON	4.5 – 5.5
TRA (A37) – E1 (B69)	LG ↔ W–R	IG switch ON	3.2 – 4.9
EFI+ (A40) – E2 (B65)	B ↔ BR	IG switch ON Main or sub throttle valve fully closed.	0.3 – 0.8
		IG switch ON Main or sub throttle valve fully open.	3.2 – 4.9
EFI– (A39) – E2 (B65)	W ↔ BR	IG switch ON Main or sub throttle valve fully closed.	0.3 – 0.8
		IG switch ON Main or sub throttle valve fully open.	3.2 – 4.9
BK (A4) – E1 (B69)	G–W ↔ W–R	IG switch ON Brake pedal depressed	7.5 – 14
		IG switch ON Brake pedal depressed	Below 1.5

(*: A = E11, B = E12)