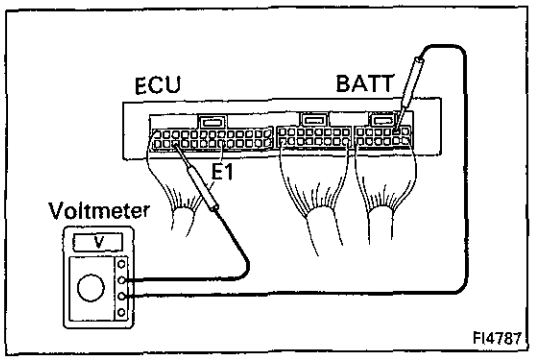


Electronic Controlled Unit (ECU)

INSPECTION OF ECU

1. MEASURE VOLTAGE OF ECU

HINT:

- The ECU itself cannot be checked directly.
- The EFI circuit can be checked by measuring the resistance and voltage at the wiring connectors of the ECU.

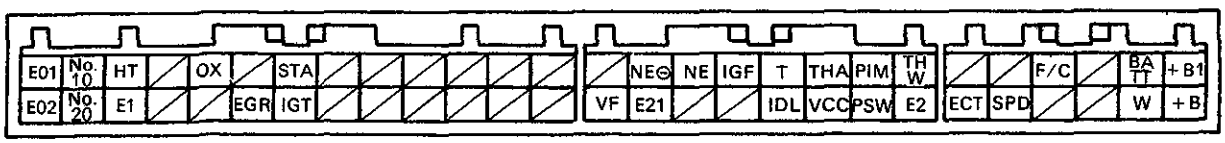
Check the voltage at the wiring connectors.

- Remove the right kick panel.
- Turn the ignition switch ON.
- Measure the voltage at each terminal.

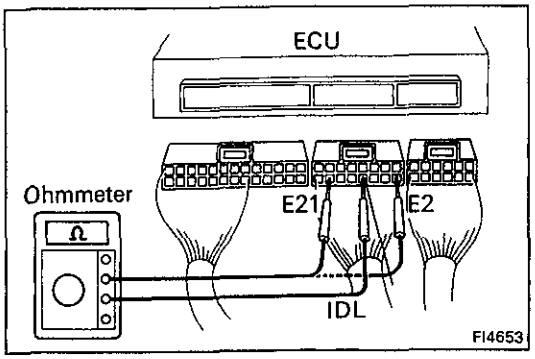
HINT: 1. Reform all voltage measurements with the connectors connected.
2. Verify that the battery voltage is 11 V or above when the ignition switch is ON.

Voltage at ECU Wiring Connectors

No.	Terminals	STD voltage (V)	Condition	
1	BATT – E1	10 – 14	———	
	+B – E1	10 – 14	Ignition switch ON	
	+B1 – E1	10 – 14		
2	IDL – E1	8 – 14	Ignition switch ON	Throttle valve open
	PSW – E1	4.5 – 5.5		Throttle valve fully closed
3	IGT – E1	0.7 – 1.0	Cranking or idling	
4	STA – E1	6 – 14	Cranking	
5	No.10 – E01 No.20 – E02	9 – 14	Ignition switch ON	
6	W – E1	9 – 14	No trouble (Check engine warning light off) and engine running	
7	PIM – E2 (E21)	3.3 – 3.9	Ignition switch ON	
	VCC – E2 (E21)	4.5 – 5.5		
8	THA – E2 (E21)	2.0 – 2.8	Ignition switch ON	Intake air temperature 20°C (68°F)
9	THW – E2 (E21)	0.4 – 0.8		Coolant temperature 80°C (176°F)



FI4786



2. **MEASURE RESISTANCE OF ECU**

NOTICE:

- **Do not touch the ECU terminals.**
- **The tester probe should be inserted into the wiring connector from the wiring side.**

Check the resistance between each terminal of the wiring connector.

- Remove the center piller garnish.
- Unplug the wiring connectors from the ECU.
- Measure the resistance between each terminal of the wiring connectors.

Resistances at ECU Wiring Connectors

Terminals	Resistance (kΩ)	Condition
IDL – E2 (E21)	Infinity	Throttle valve open
	0	Throttle valve fully closed
PSW – E2 (E21)	0	Throttle valve fully open
	Infinity	Throttle valve fully closed
THA – E2 (E21)	2 – 3	Intake temperature 20°C (68°F)
THW – E2 (E21)	0.2 – 0.4	Coolant temperature 80°C (176°F)
Ne – Ne ⊖	0.28 – 0.36	–