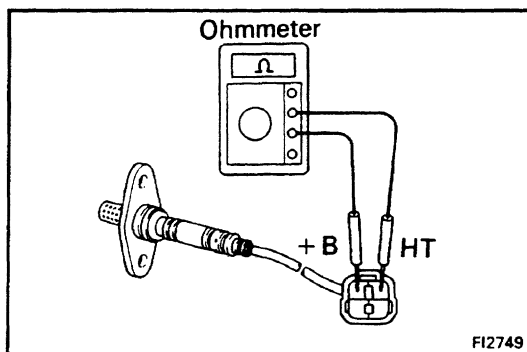


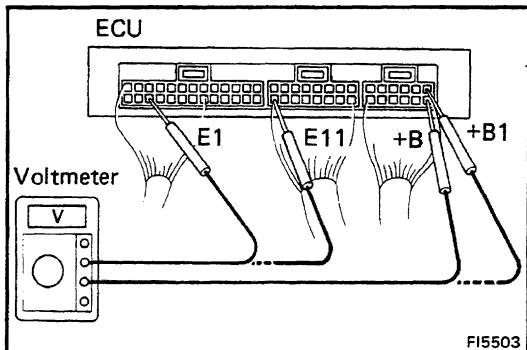


3. INSPECT HEATER RESISTANCE OF OXYGEN SENSOR

Using an ohmmeter, measure the resistance between the terminal + 8 and HT.

Resistance (Cold): 5.1 – 6.3Ω

If the resistance is not as specified, replace the sensor.



Electronic Controlled Unit (ECU)

INSPECTION OF ECU

HINT: The EFI circuit can be checked by measuring the resistance and voltage at the wiring connectors of the ECU.

1. INSPECT VOLTAGE OF ECU

Check the voltage between each terminal of the wiring connectors.

- Turn the ignition switch ON.
- Measure the voltage at each terminal.

HINT:

- Perform all voltage measurements with the connectors connected.
- Verify that the battery voltage is 11 V or more when the ignition switch is ON.

Voltage at ECU Wiring Connectors

Terminals	STD Voltage	Condition	
BATT-E1(E11)	10 – 14	—	
1G SW-E1(E11)		Ignition switch ON	
M-REL-E1 (E 11)			
+B (+B1)-E1 (E11)			
IDL-E2	4 – 6	Ignition switch ON	Throttle valve open
VC-E2	4 – 6		—
V _i A-E2	0.1 – 1.0		Throttle valve fully closed
	3 – 5		Throttle valve fully open
VC-E2	4 – 6	Ignition switch ON	—
VS-E2	4 – 5		Measuring plate fully closed
	0.02 – 0.08		Measuring plate fully open
	2 – 4		Idling
	0.3 – 1.0		3,000 rpm

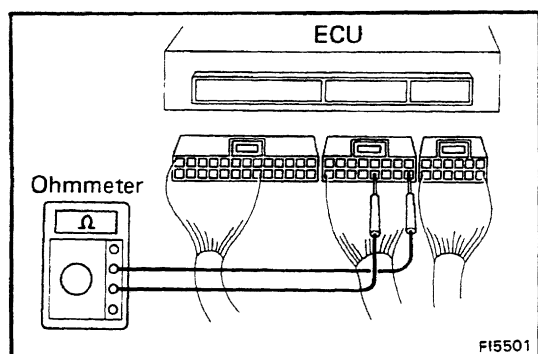
Voltage at ECU Wiring Connectors (Cont'd)

Terminals	STD Voltage	Condition	
THA - E2	1 - 3	Ignition switch ON	Intake air temperature 20°C (88°F)
THW - E2	0.1 - 1.0	Ignition switch ON	Coolant temperature 80°C (176°F)
No. 10 - E01 No. 20 - E02	10 - 14	Ignition switch ON	
STA-E1 (E11)	6 - 14	Cranking	
ISC 1 -E1 (E11) ISC4	10 - 14	ignition switch ON	
IGT- E 1 (E 11)	0.7 - 1.0	Idling	
W-E1 (E11)	10 - 14	No trouble ("CHECK" engine warning light off) and engine running	
A/C-E1 (E1 1)	10 - 14	Air conditioning ON	
T-E1(E11)	4 - 6	Ignition switch ON	Check connector TE 1 and E 1 not connect
	0		Check connector TE 1 and E 1 connect
NSW-E1 (E11)	0	Ignition switch ON	Shift position P or EV range
	10 - 14		Ex. P or N range
4WD-E1 (E1 1).	10 - 14	Ignition switch O N	Center difflock switch ON
	0		Center difflock switch OFF
STP-E1 (E11)	10 - 14	Ignition switch ON	Stop light switch ON
	0		Stop light switch OFF

ECU Terminals

E01	No.10	STJ	ISC1	ISC2	ISC3	ISC4	/	FPU	NE	IGF	STA	HT2	VF1	VF2	OX1	OX2	THW	MREL	VS	VC	IGSW	STP	/	/	BATT +B1
E02	No.20	E1	AI	IGT	TWS	/	/	G1	G2	EGR	NSW	HT1	E11	T	/	THG	IDL	THA	VTB	E2	4WD	SPD	A/C	/	W +B

* California vehicles only



2. INSPECT 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 connectors.

- Disconnect the connectors from the ECU.
- Measure the resistance at each terminal.

Resistance of ECU Wiring Connectors

Terminals	Condition	Resistance (Ω)
IDL-E2	Throttle valve open	∞
	Throttle valve fully closed	Less than 2,300
VTA - E2	Throttle valve fully open	3,500 - 10,300
	Throttle valve fully closed	300 - 6,300
VC - E2	Air flow meter connector disconnected	4,250 - 8,250
VC - E2	Throttle position sensor connector disconnected	200 - 400
VS - E2	Measuring plate fully closed	20 - 600
	Measuring plate fully open	200 - 3,000
THA - E2	Intake air temperature 20°C (68°F)	2,000 - 1,200
TH W - E2	Coolant temperature 80°C (176°F)	200 - 400
G1 -G (-)	-	140 - 180
NE-G (-)	-	
ISC1, ISC2 ISC3, ISC4 - +B	-	10 - 30

ECU Terminals

E01	No.10	STJ	ISC1	ISC2	ISC3	ISC4	FPU	NE	IGF	STA	HT2	VF1	VF2	OX1	OX2	THW	MREL	VS	VC	IGSW	STP	BATT +B1
E02	No.20	E1	AI	IGT	TWS		G1	G $\ominus$	EGR	NSW	HT1	E11	T	THG	IDL	THA	VTA	E2	4WD	SPD	A/C	W +B

*California vehicles only