TROUBLESHOOTING WITH VOLT OHMMETER

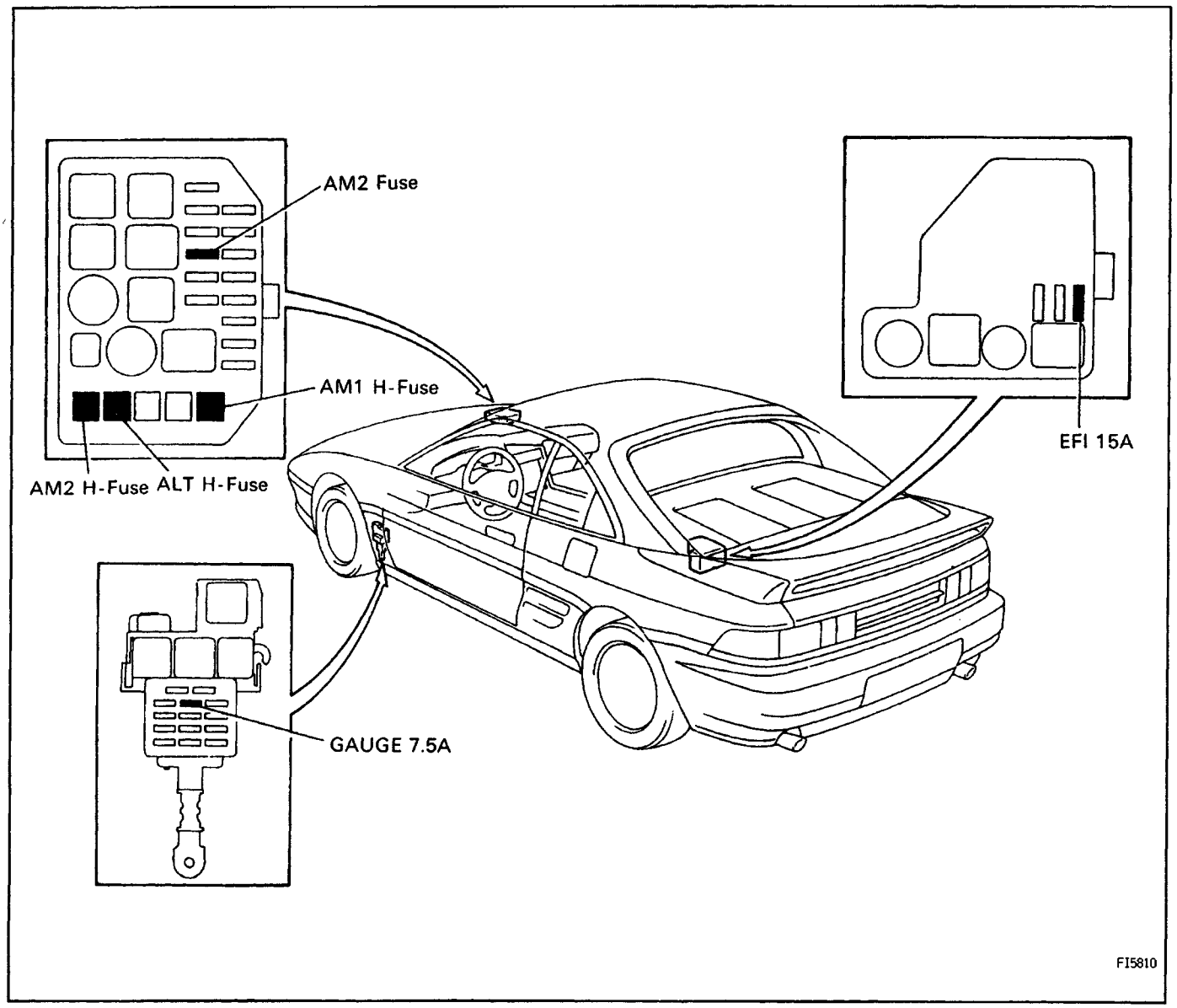
EG129–01

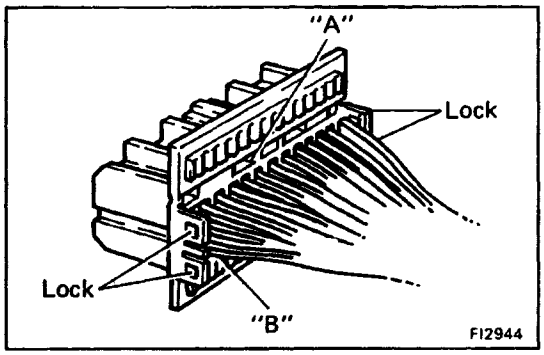
HINT:

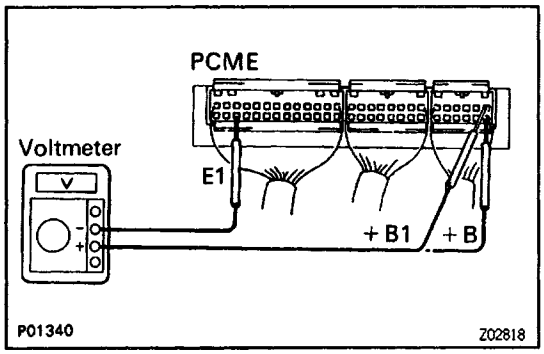
- The following troubleshooting procedures are designed for inspection of each separate system, and therefore the actual procedure may vary somewhat. However, troubleshooting should be performed while referring to the inspection methods described in this manual.
- Before beginning inspection, it is best to first make a simple check of the fuses, H–fuses, fusible link and the condition of the connectors.
- The following troubleshooting procedures are based on the supposition that the trouble lies in either a short or open circuit within the computer.
- If engine trouble occurs even though proper operating voltage is detected in the computer connector, then it can be assumed that the PCME(& T) is faulty and should be replaced.

EG128–01

FUSES, H– FUSES AND FUSIBLE LINK LOCATION







MPI SYSTEM CHECK PROCEDURE (M/T)

PREPARATION

(a) Disconnect the connectors from the PCME.

(b) Remove the locks as shown in the illustration so that the tester probe(s) can easily come in.

NOTICE: Pay attention to sections "A' and 'B' in the illustration which can be easily broken.

(c) Reconnect the connectors to the PCME.

HINT:

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

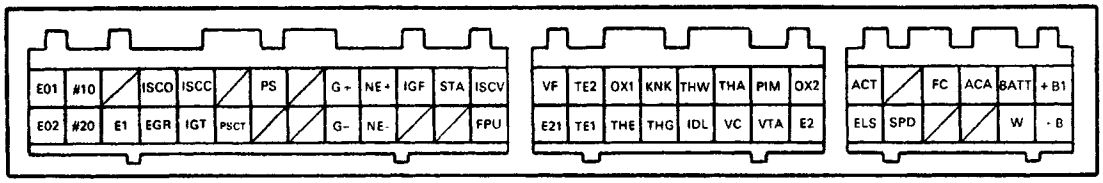
Using a voltmeter with high impedance (10 kΩ/V minimum), measure the voltage at each terminal of the wiring connectors.

PCME Terminals (M/T)

Symbol	Terminal Name	Symbol	Terminal Name	Symbol	Terminal Name
E01	POWER GROUND	NE +	DISTRIBUTOR	THA	INTAKE AIR TEMP. SENSOR
E02	POWER GROUND	NE –	DISTRIBUTOR	VC	MAP THROTTLE POSITION SENSOR
#10	INJECTOR	IGF	IGNITER	PIM	MAP
#20	INJECTOR		–	VTA	THROTTLE POSITION SENSOR
	–	STA	STARTER RELAY	*OX2	SUB–OXYGEN SENSOR
E1	ENGINE GROUND		–	E2	SENSOR GROUND
ISCO	IDLE AIR CONTROL VALVE	ISCV	A/C IDLE–UP VSV	ACT	A/C AMPLIFIER
EGR	EG R VSV	FPU	FUEL PRESSURE VSV	ELS	TAILLIGHT RELAY DEFOGGER SWITCH
ISCC	IDLE AIR CONTROL VALVE	VF	DLC1		
IGT	IGNITER	E21	SENSOR GROUND	SPD	VSPG
	–	TE2	DLC1	FC	CIRCUIT OPENING RELAY
	–	TE1	DLC1		–
PSCT	PS CONTROL MODULE	OX1	MAIN OXYGEN SENSOR	ACA	A/C AMPLIFIER
PS	PS CONTROL MODULE	THE	EVAPORATOR TEMP. SENSOR		–
	–	KNK	KNOCK SENSOR	BATT	BATTERY
	DISTRIBUTOR	*THG	EGR FUNCTION SENSOR	W	WARNING LIGHT
G +		THW	ECTS	+B1	MPI MAIN RELAY
G –	DISTRIBUTOR	IDL	THROTTLE POSITION SENSOR	+B	MPI MAIN RELAY

*Calif. only

PCME Terminals

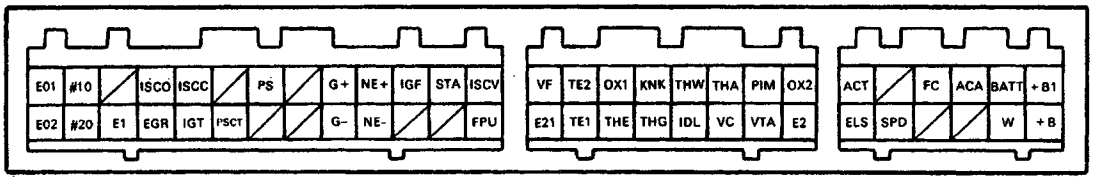


V00947

PCME Wiring Connectors Voltage (M/T)

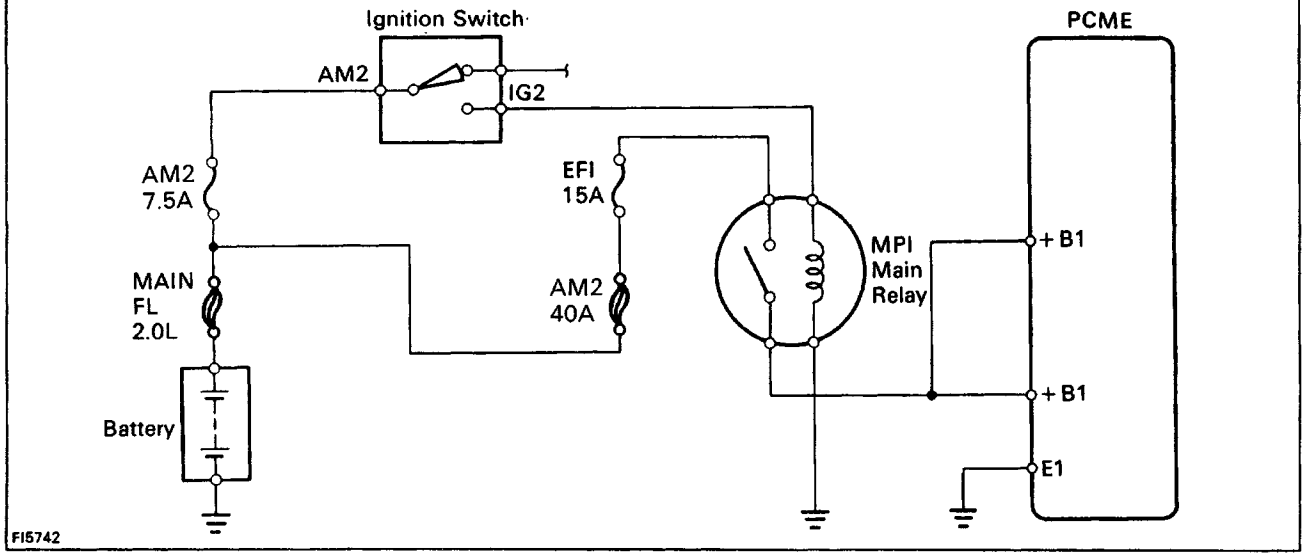
No.	Terminals	Condition		STD voltage (V)	See page
1	+B + B1 – E1	IG SW ON		9 – 14	EG2–220
2	BATT – E1	–		9 – 14	EG2–221
3	IDL – E2	IG SW ON	Throttle valve open	9 – 14	EG2–222
	VC – E2		–	4.5 – 5.5	
	VTA – E2		Throttle valve fully closed (Throttle opener must be cancelled first)	0.3 – 0.8	
			Throttle valve fully open	3.2 – 4.9	
4	PIM – E2	IG SW ON		3.3 – 3.9	EG2–224
	VC – E2			4.5 – 5.5	
5	#10 – E01 #20 – E02			9 – 14	EG2–225
6	THA – E2	IG SW ON	Intake air temp. 20°C (68°F)	0.5 – 3.4	EG2–226
7	THW – E2		Coolant temp. 80°C (176°F)	0.2 – 1.0	EG2–227
8	STA – E1	Cranking		6 or more	EG2–228
9	IGT – E1	Idling		Pulse generation	EG2–229
10	ISCO – E1	IG SW ON		8 – 14	EG2–230
11	W – E1	No trouble (”CHECK” engine warning light off) and engine running		9 – 14	EG2–231

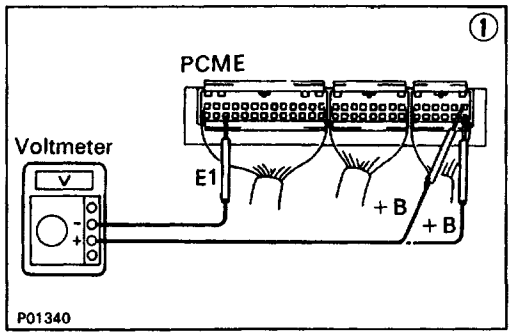
PCME Terminals

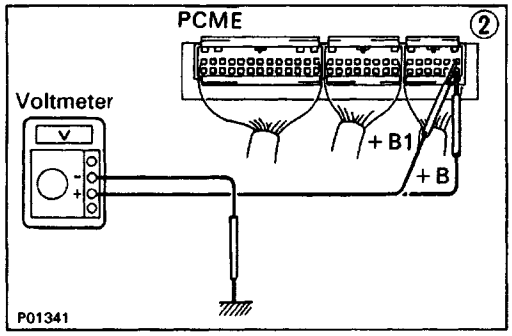


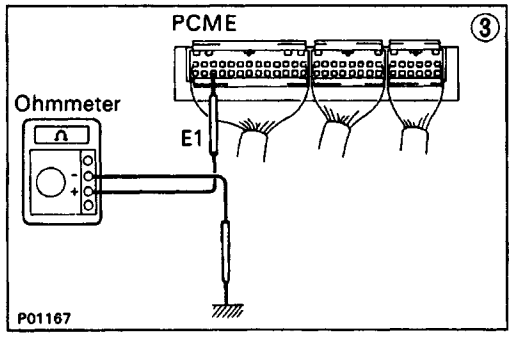
P01821

No.	Terminals	Trouble	Condition	STD voltage
1	+B + B1 –E1	No voltage	IG SW ON	9–14V









(1) There is no voltage between PCME terminals +B or +B1 and E1 **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal +B or +B1 and body ground. **(IG SW ON)**

NO → OK

↓

(3)Check wiring between PCME terminal E1 and body ground.

OK → Try another PCME.

BAD → Repair or replace.

↓

Check fuses, H–fuse, fusible link and ignition switch

BAD → Repair or replace.

↓ OK

Check M PI main relay. (See page EG2–302)

BAD → Replace.

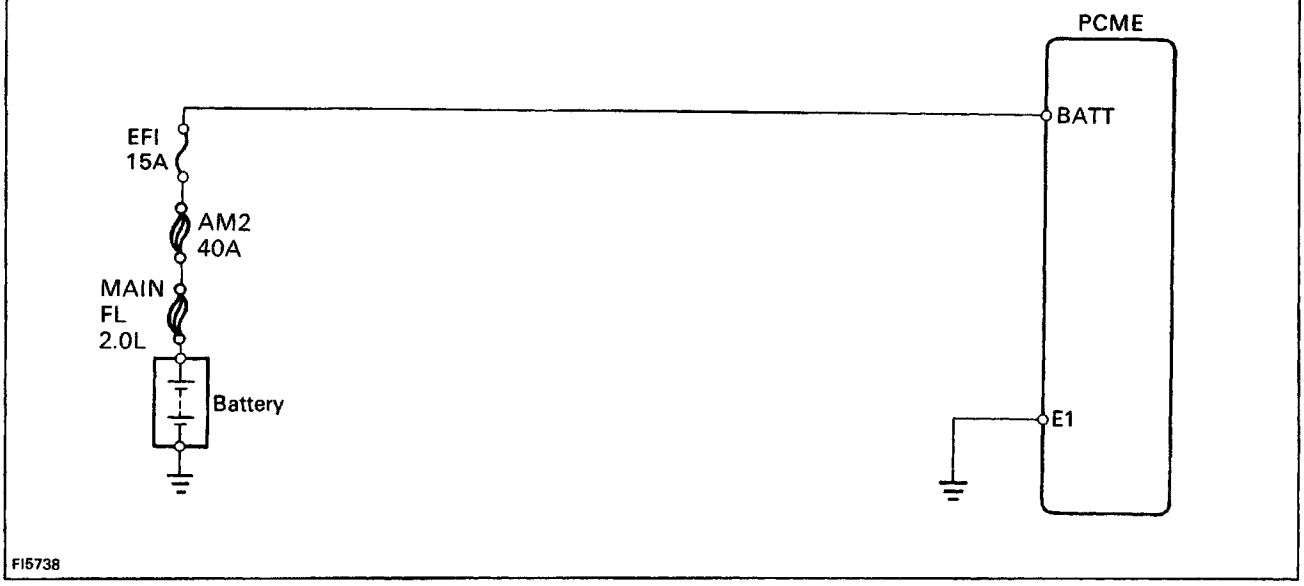
↓ OK

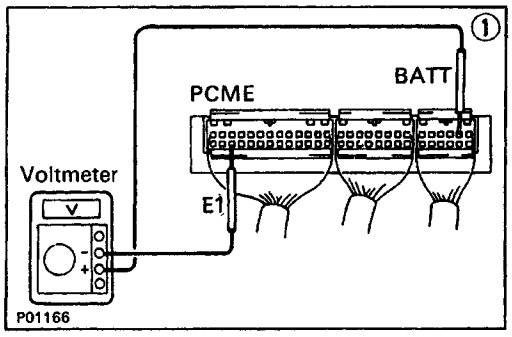
Check wiring between MPI main relay and battery.

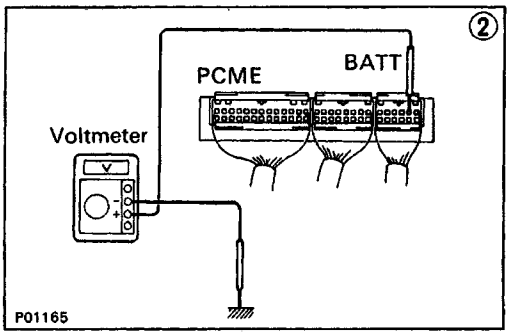
BAD → Repair or replace.

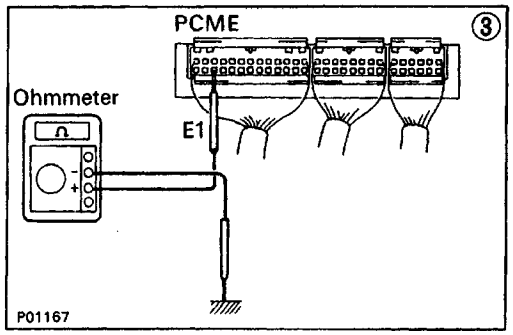
V00919

No.	Terminals	Trouble	Condition	STD voltage
2	BATT – E1	No voltage	–	9 – 14 V









(1) There is no voltage between PCME terminals BATT and E1.

↓

(2) Check that there is voltage between PCME terminal BATT and body ground.

NO → ↓

OK → (3) Check wiring between PCME terminal E1 and bodground.

OK → Try another PCME.

BAD → Repair or replace.

↓

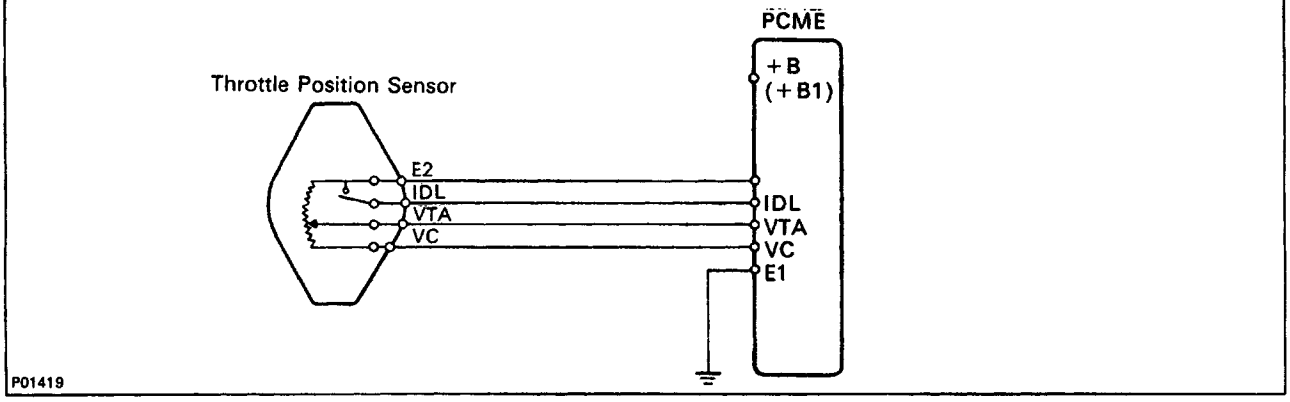
Check fuse, H–fuse and fusible link. BAD → Replace.

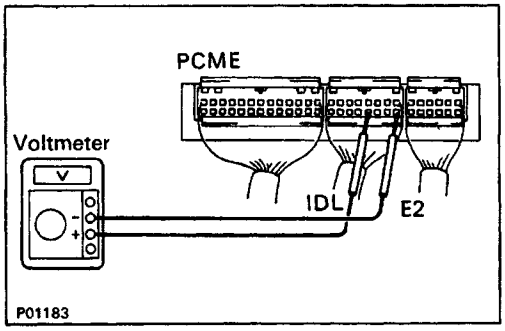
OK → ↓

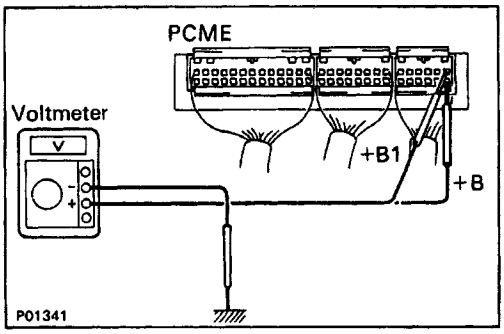
Check wiring between PCME terminal and battery. BAD → Repair or replace.

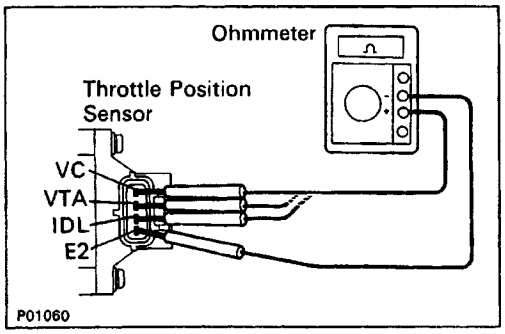
V00920

No.	Terminals	Trouble	Condition		STD voltage
3	ID – E2	No voltage	IG SW ON	Throttle valve open	9 – 14 V
	VC – E2			–	4.5 – 5.5 V
	VTA – E2			Throttle valve fully closed Throttle opener must be cancelled first	0.3 – 0.8 V
				Throttle valve fully open	3.2 – 4.9 V









- **IDL – E2**

(1) There is no voltage between PCME terminals IDL and E2 **(IG SW ON)** (Throttle valve open)

↓

(2) Check that there is voltage between PCME terminal + B (+B1) and body ground. **(IG SW ON)**

NO / OK

OK → Check wiring between PCME terminal E1 and body ground.

OK → Try another PCME.

BAD → Repair or replace.

BAD → Repair or replace.

↓ OK

(3) Check throttle position sensor. (See page EG2–288)

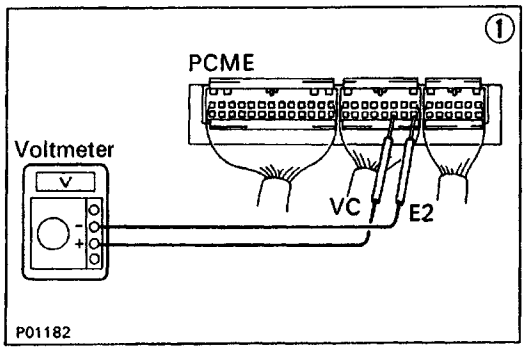
BAD → Repair or replace throttle position sensor.

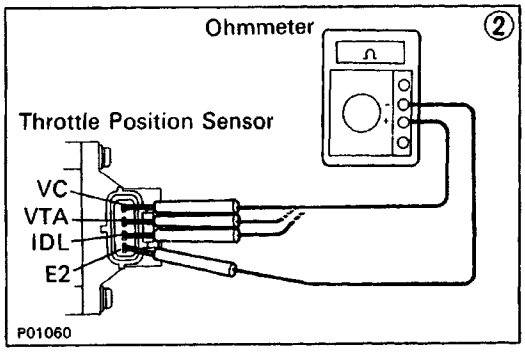
OK → Check wiring between PCME and throttle position sensor.

↓ OK

Try another PCME.

V00921





• VC–E2

(1) There is no voltage between PCME terminals VC and E2. **(IG SW ON)**

↓

Check that there is voltage between PCME terminal + B (+B1) and body ground. **(IG SW ON)**

↓ OK

(2) Check throttle position sensor. (See page EG2–288)

↓ BAD

Repair or replace.

↓ OK

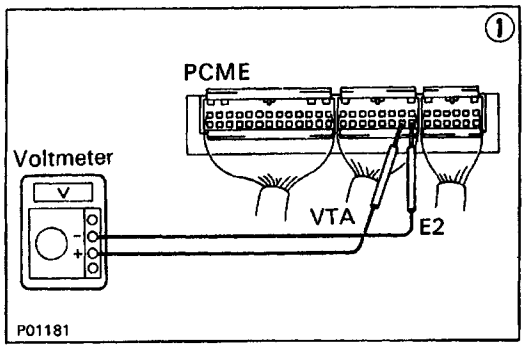
Check wiring between PCME and throttle position sensor.

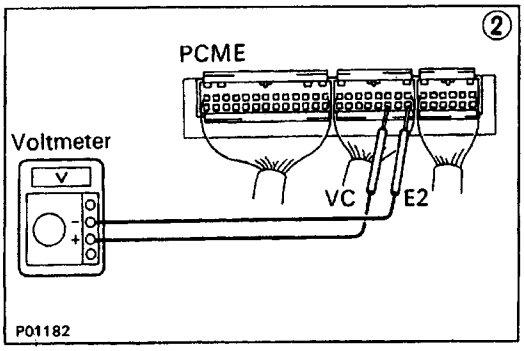
↓ OK

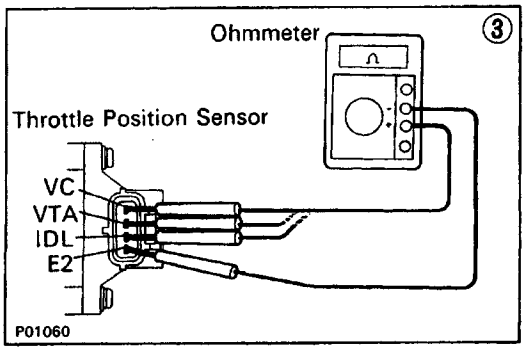
Try another PCME.

NO → Refer to No.1. (See page EG2–220)

BAD → Repair or replace wiring.







• VTA–E2

(1) There is no specified voltage at PCME terminals VTA and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminals VC and E2. **(IG SW ON)**

↓ NO

Refer to VC–E2 trouble Section.

↓ OK

Check throttle position sensor. (See page EG2–288)

↓ OK

Check wiring between PCME and throttle position sensor.

↓ OK

Try another PCME.

OK → Check throttle position sensor. (See page EG2–288)

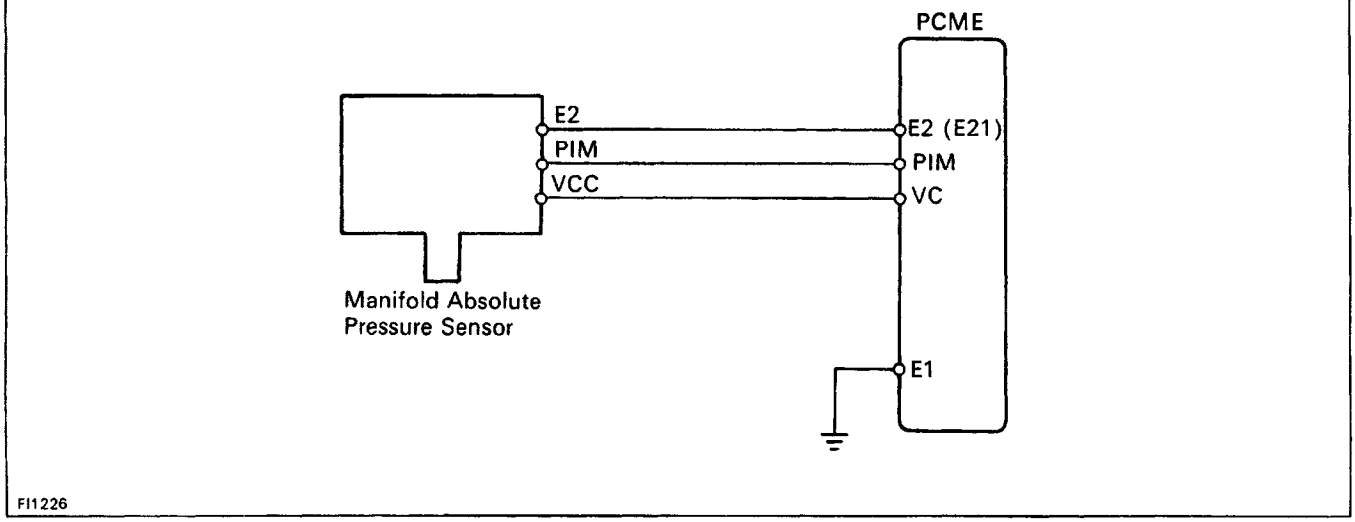
BAD → Repair or replace.

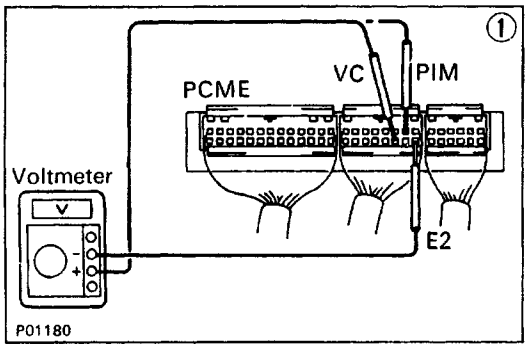
OK → Check wiring between PCME and throttle position sensor.

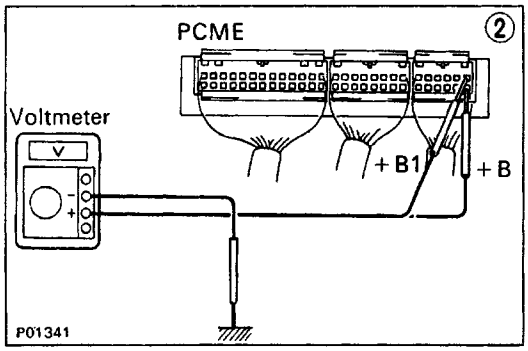
BAD → Repair or replace.

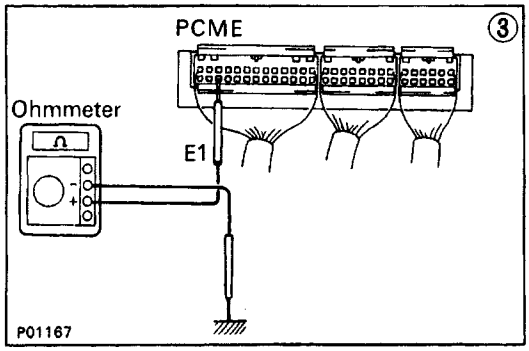
V00922

No.	Terminals	Trouble	Condition	STD voltage
4	PIM – E2	No voltage	IG SW ON	3.3 – 3.9 V
	VC – E2			4.5 – 5.5 V









(1) There is no voltage between PCME terminals PIM or VC and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal + B (+B1) and body ground. **(IG SW ON)**

OK ↓

NO → Refer to No.1. (See page EG2–220)

↓

(3) Check wiring between PCME terminal E1 and body ground.

OK ↓

BAD → Repair or replace.

Check manifold absolute pressure sensor. (See page EG2–319)

BAD → Replace manifold absolute pressure sensor.

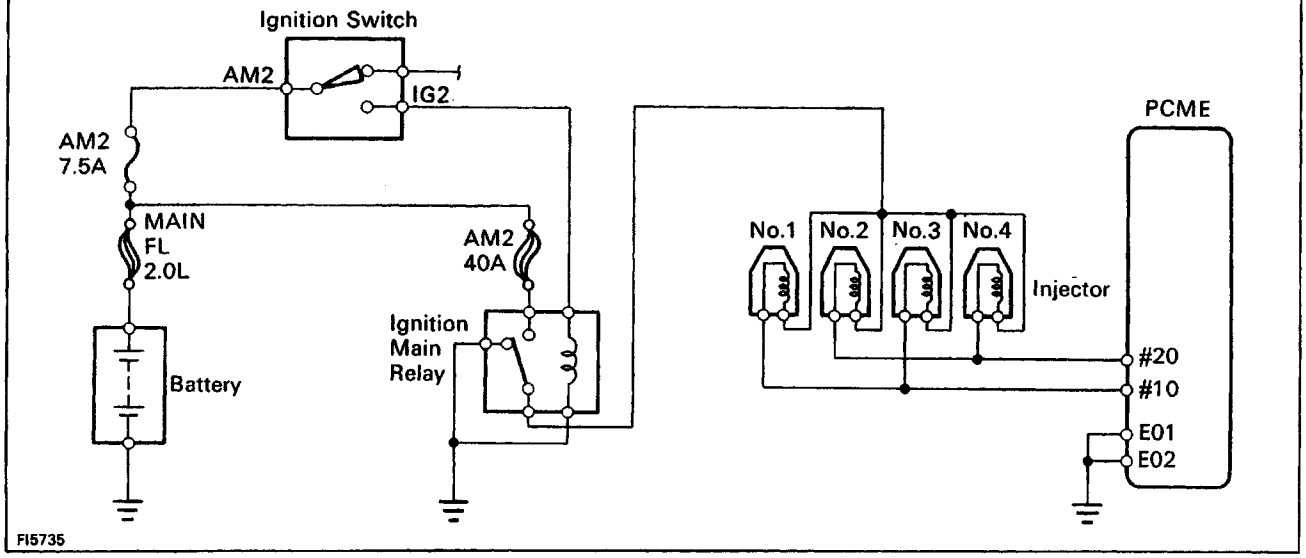
OK → Check wiring between PCME and manifold absolute pressure sensor.

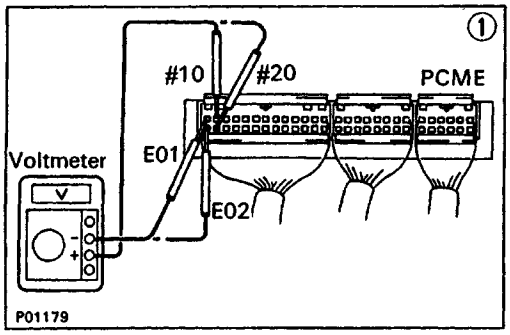
OK → Try another PCME.

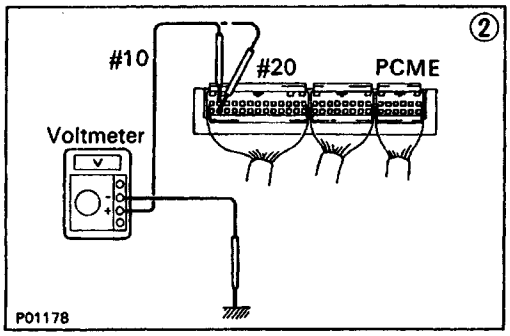
BAD → Repair or replace.

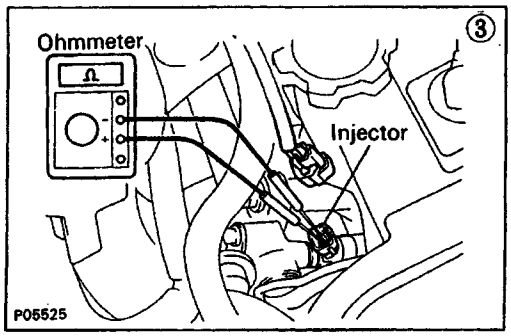
V00923

No.	Terminals	Trouble	Condition	STD voltage
5	#10 – E01 #20 – E02	No voltage	IG SW ON	9 – 14 V









(1) There is no voltage between PCME terminals #10 and/or #20 and E01 and/or E02. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal #10 and/or #20 and body ground.

NO → OK

↓

Check wiring between PCME terminal E01 and/or E02 and body ground.

OK → Try another PCME.

BAD → Repair or replace.

↓

Check fuse, H–fuse, fusible link, ignition switch and ignition main relay. BAD → Repair or Replace.

↓ OK

(3) Check resistance of each injector.
STD resistance: Approx. 13.8Ω

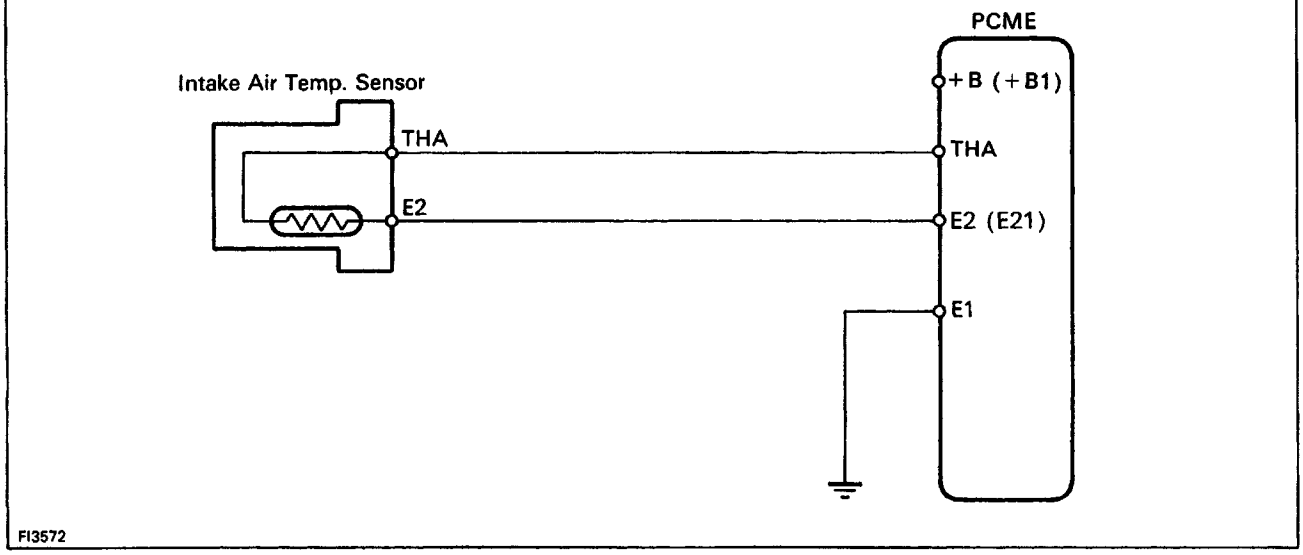
OK → ↓

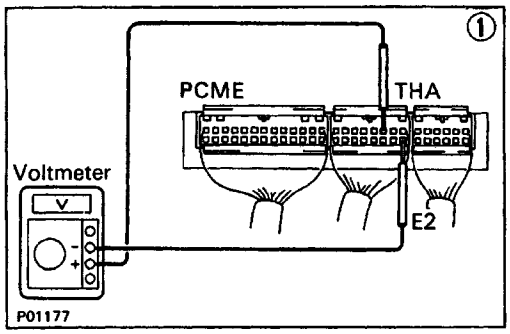
BAD → Replace injector.

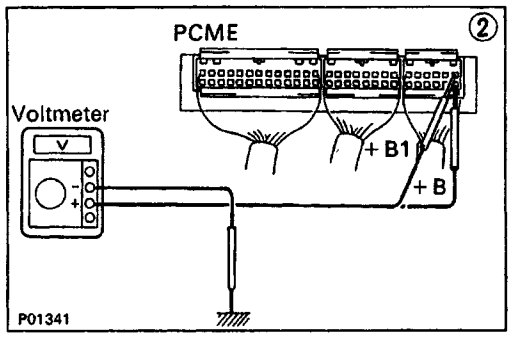
↓

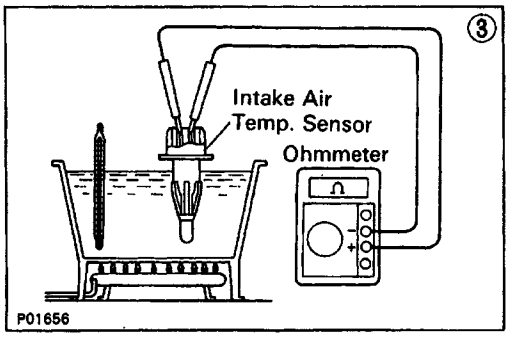
Check wiring between PCME terminal No.10 and/or No.20 and battery. BAD → Repair or replace.

No.	Terminals	Trouble	Condition		STD voltage
6	THA – E2	No voltage	IG SW ON	Intake air temperature 20°C (68°F)	0.5 – 3.4 V









(1) There is no voltage between PCME terminals THA and E2 **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal + B or + B1 and body ground. **(IG SW ON)**

OK → ↓

NO → Refer to No.1. (See page EG2–220)

↓

Check wiring between PCME terminal E1 and body ground.

OK → ↓

BAD → Repair or replace.

↓

(3) Check intake air temp. sensor. (See page EG2–306)

BAD → Replace intake air temp. sensor.

OK → ↓

Check wiring between PCME and air temp. sensor.

OK → ↓

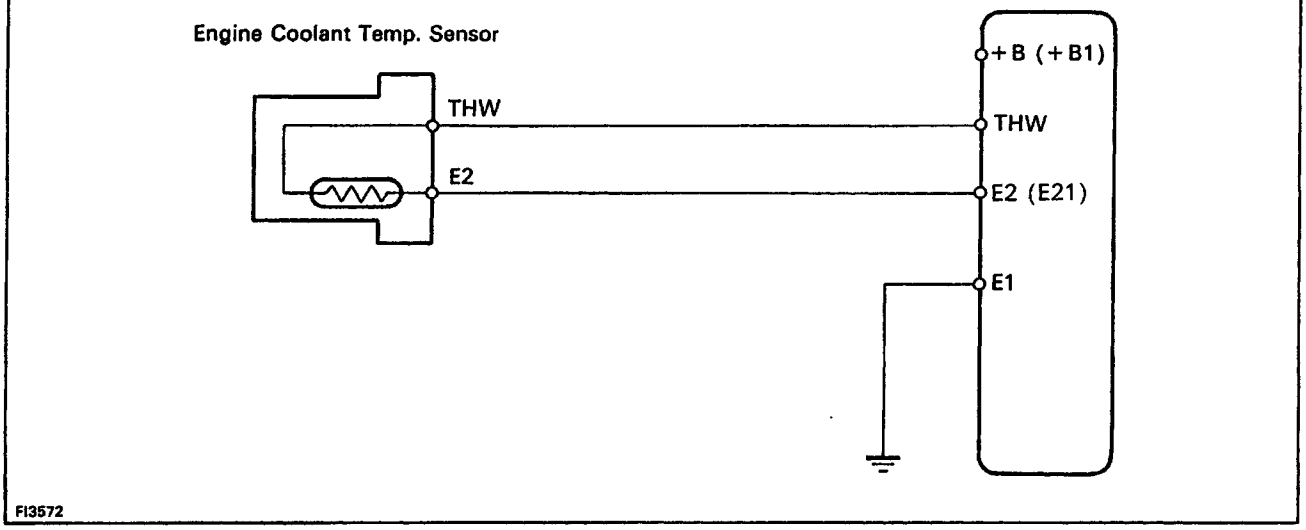
BAD → Repair or replace.

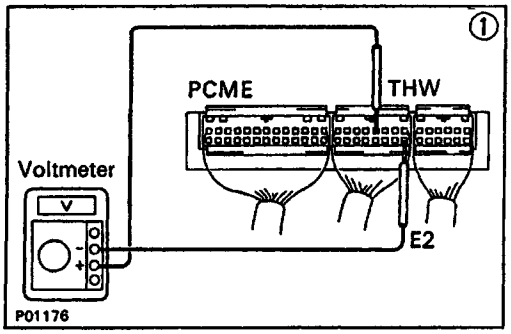
↓

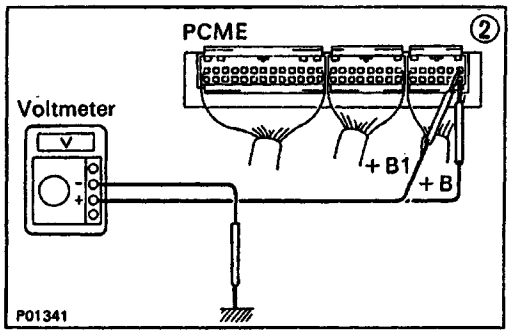
Try another PCME.

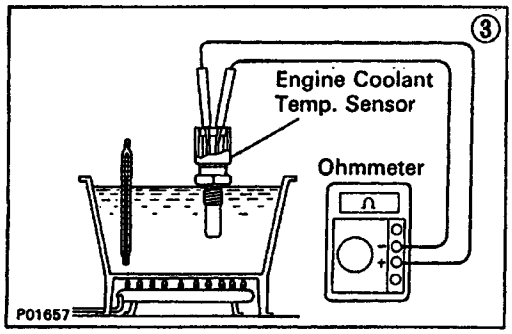
V00925

No.	Terminals	Trouble	Condition		STD voltage
7	THW – E2	No voltage	IG SW ON	Coolant temperature 80°C (176°F)	0.2 – 1.0 V









(1) There is no voltage between PCME terminals THW and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal + B (+B1) and body ground. **(IG SW ON)**

OK → ↓

NO → Refer to No.1. (See page EG2–220)

↓

Check wiring between PCME terminal E1 and body ground.

OK → ↓

BAD → Repair or replace.

(3)Check engine coolant temp. sensor. (See page EG2–305)

BAD → Repair engine coolant temp. sensor.

OK → ↓

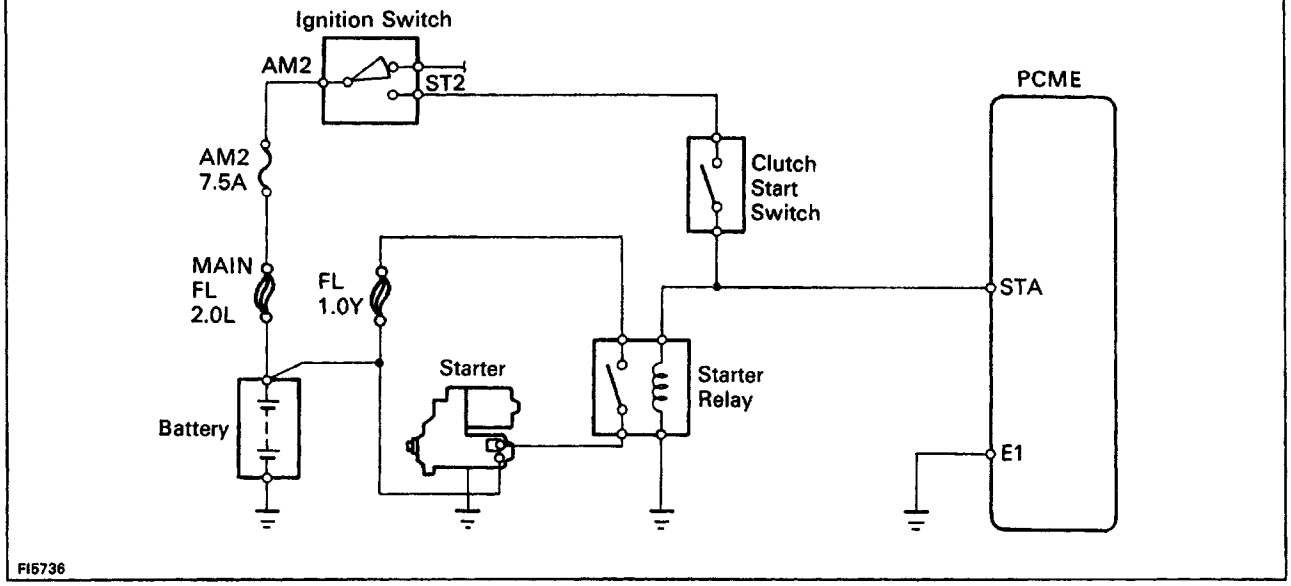
Check wiring between PCME and engine coolant temp. sensor.

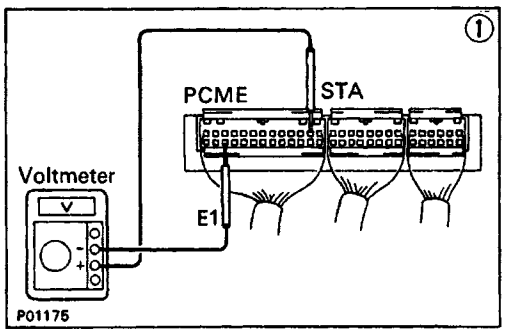
OK → ↓

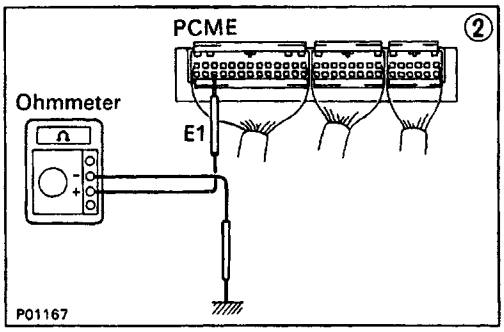
BAD → Repair or replace.

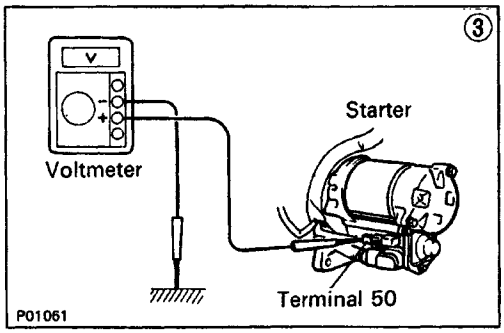
Try another PCME.

No.	Terminal	Trouble	Condition	STD voltage
8	STA – E1	No voltage	Cranking	6 V or more







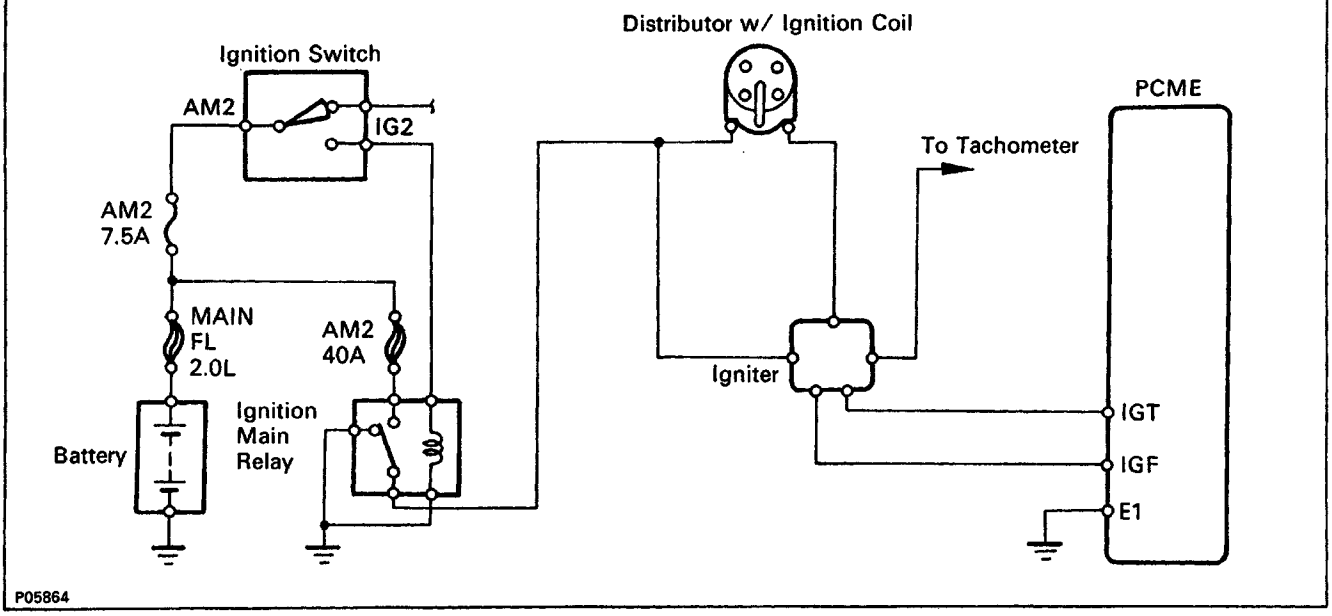


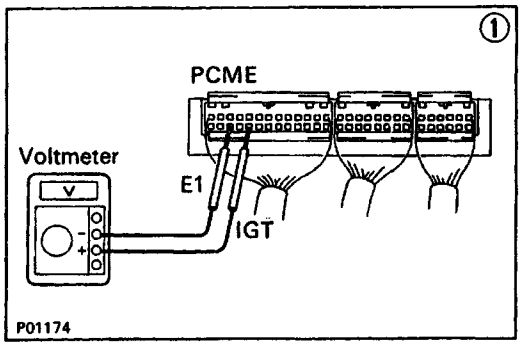
(1) There is no voltage between PCME terminals STA and E1.
(IG SW ON)

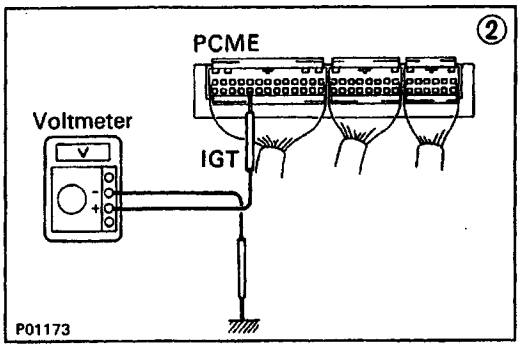
Check starter operation.
- OK → Check wiring between PCME terminal STA and ignition switch terminal ST2.
  - OK → (3) Check wiring between PCME terminal E1 and body ground.
    - OK → Try another PCME.
    - BAD → Repair or replace.
  - BAD → Repair or replace.
- BAD → Check fuse, H–fuse, fusible link, battery, wiring, ignition switch, clutch start switch and starter relay.
  - BAD → Repair or replace.
  - OK → (3) Check that there is voltage at starter terminal 50.
    (IG SW START) STD voltage: 6 V or more
    - OK → Check starter.
    - NO → Check wiring between ignition switch terminal ST2 and starter terminal 50.

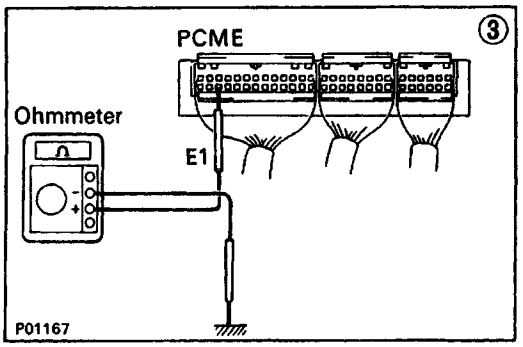
V00927

No.	Terminals	Trouble	Condition	STD voltage
9	IGT – E1	No voltage	Idling	Pulse generation









(1) There is no voltage between PCME terminals IGT and E1. **(Idling)**

↓

(2) Check that there is voltage between PCME terminal IGT and body ground. **(Idling)**

NO → OK

(3) Check wiring between PCME terminal E1 and body ground. — BAD → Repair or Replace.

OK → Try another PCME.

Check fuse, H–fuse, fusible link, ignition switch and ignition main relay. — BAD → Repair or replace.

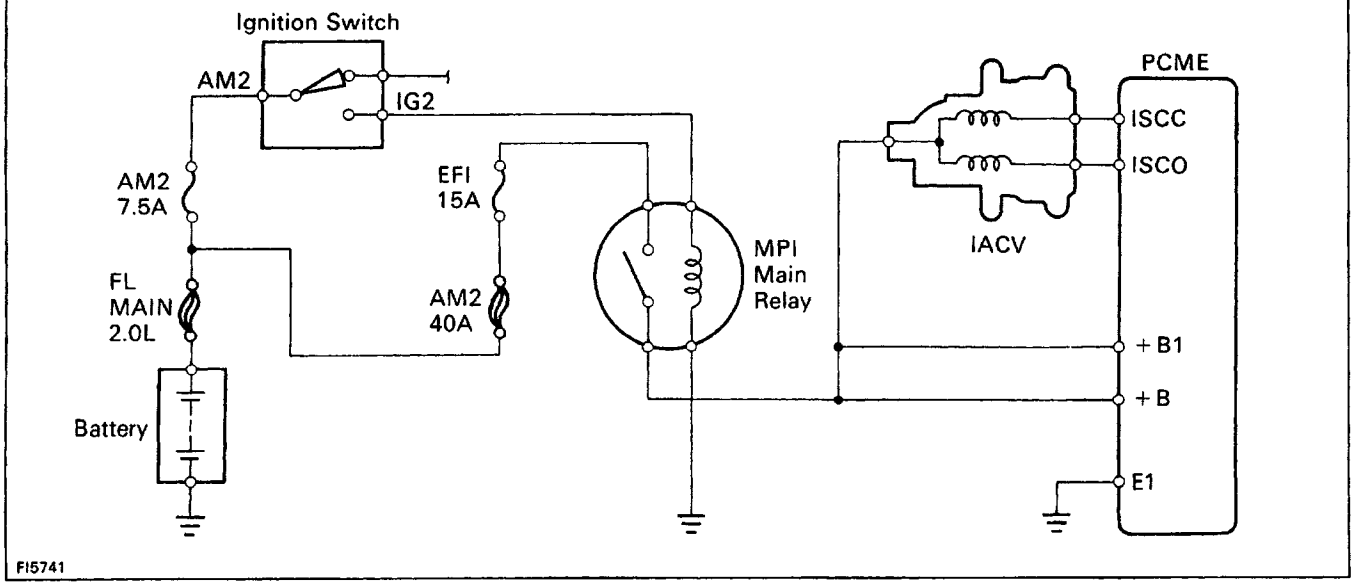
OK → Check distributor. (See IG section) — BAD → Repair or replace.

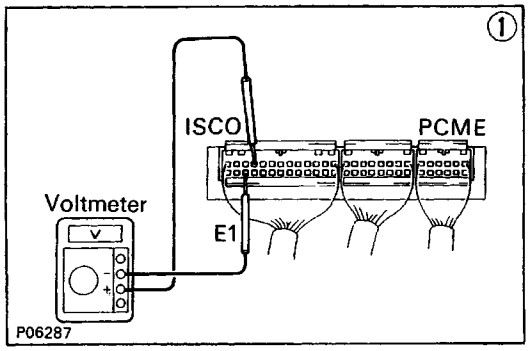
OK → Check wiring between PCME and battery — BAD → Repair or replace.

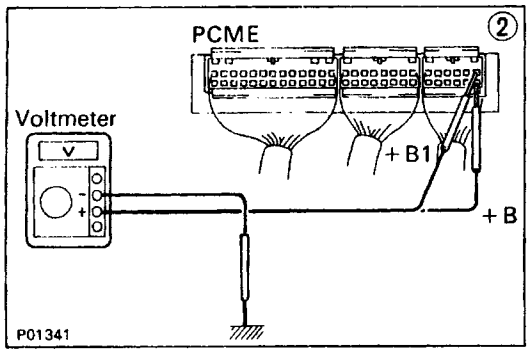
OK → Check igniter. (See IG section) — BAD → Repair or replace.

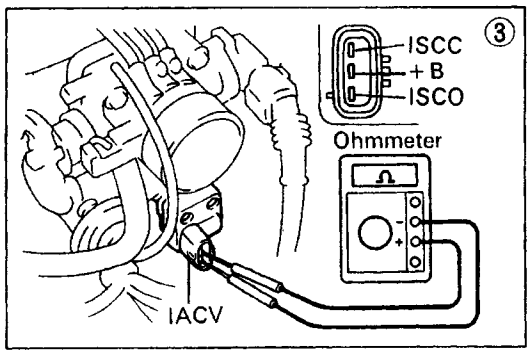
V00928

No.	Terminals	Trouble	Condition	STD voltage
10	ISCO – E1	No voltage	IG SW ON	9 – 14 V









(1) There is no voltage between PCME terminals ISCO and E1. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal + B or + B1 and body ground. **(IG SW ON)**

OK ↓

NO → Refer to No.1. (See page EG2–220)

↓

(3) Check resistance between IACV terminals + B and ISCC or ISCO. **STD resistance: 19.3 – 22.3Ω**

BAD → Replace IACV.

OK ↓

Check wiring between PCME and IACV.

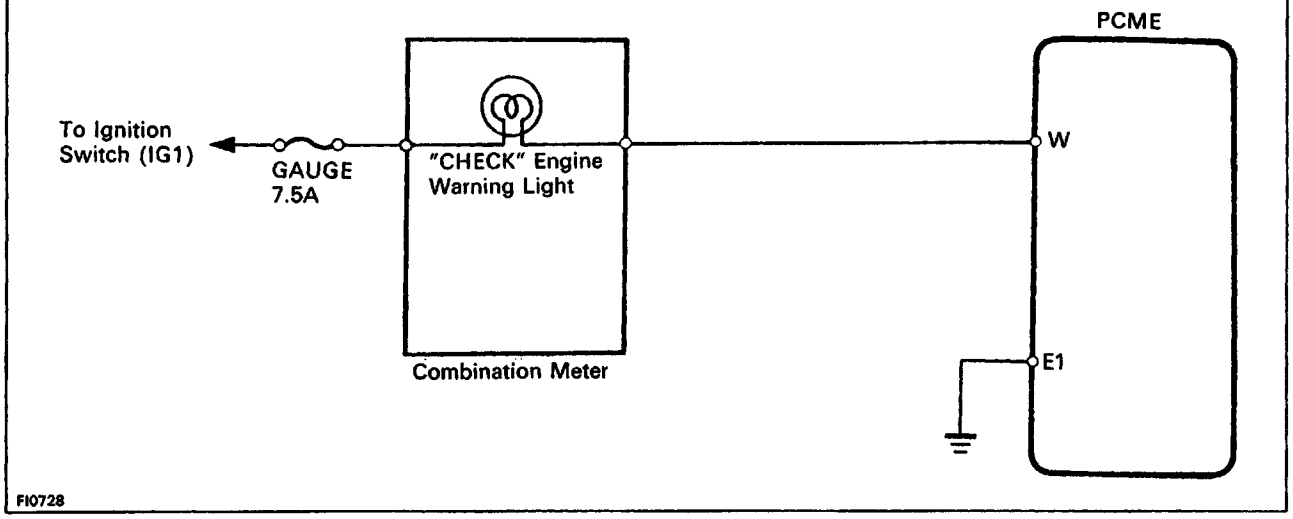
BAD → Repair or replace wiring.

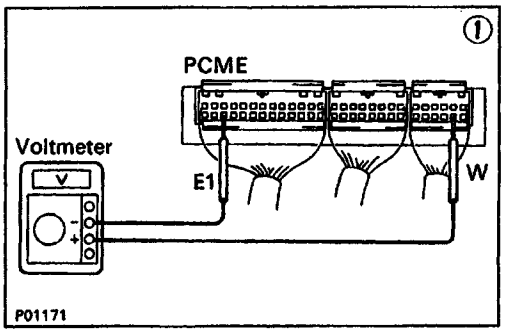
OK ↓

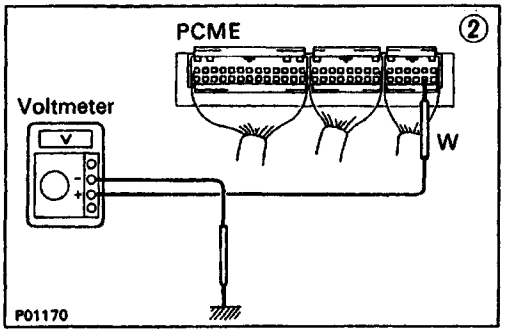
Try another PCME.

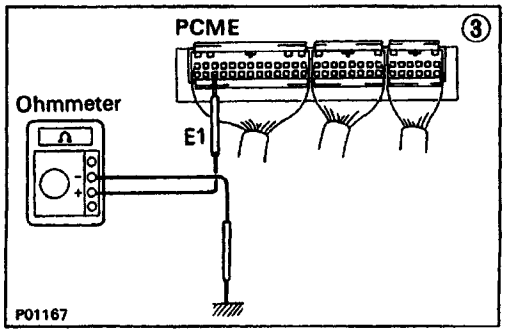
V00929

No.	Terminals	Trouble	Condition	STD voltage
11	W – E1	No voltage	No trouble ("CHECK" engine warning light off) and engine running.	9–14V









(1) There is no voltage between PCME terminals W and E1. **(Idling)**

↓

(2) Check that there is voltage between PCME terminal W and body ground.

NO → ↓ OK

(3) Check wiring between PCME terminal E1 and body ground.

↓ OK → Try another PCME.

→ BAD → Repair or replace.

Check fuse GAUGE (7.5A) and check engine warning light.

↓ OK

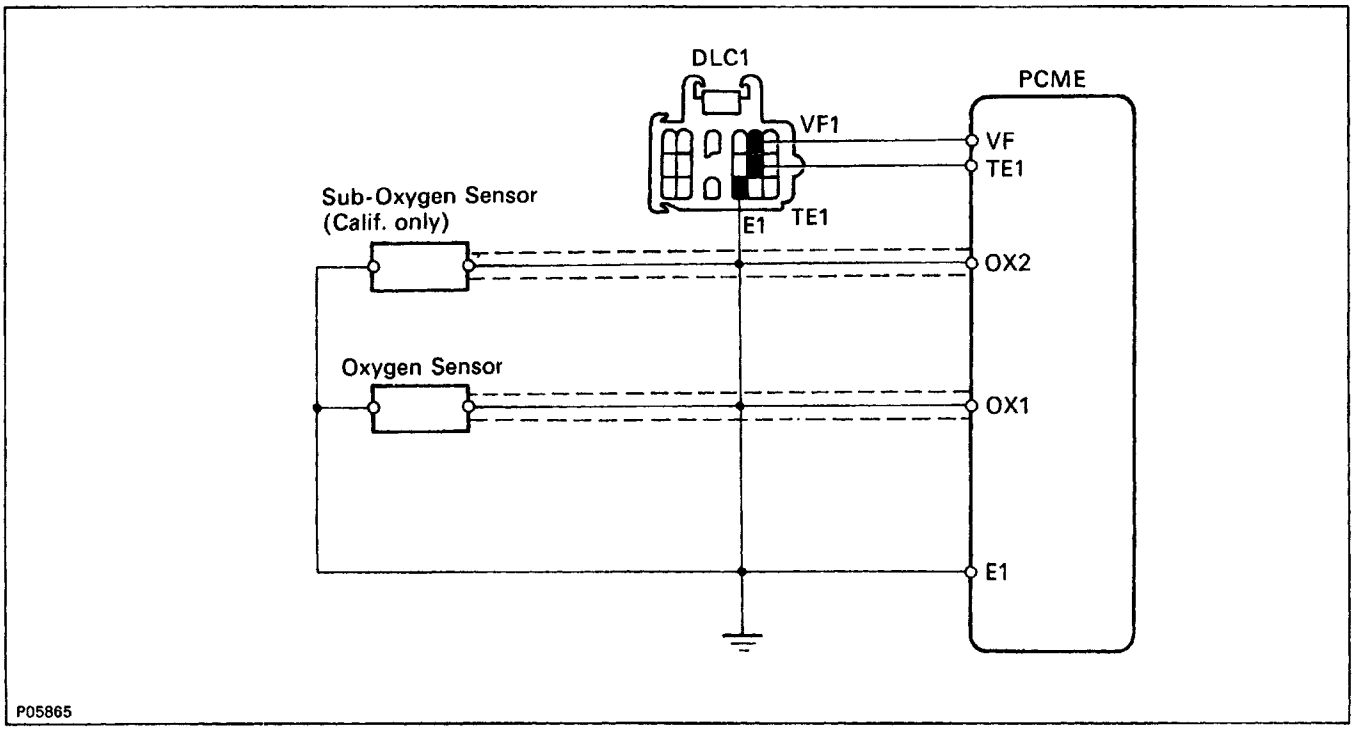
→ BAD → Repair or replace.

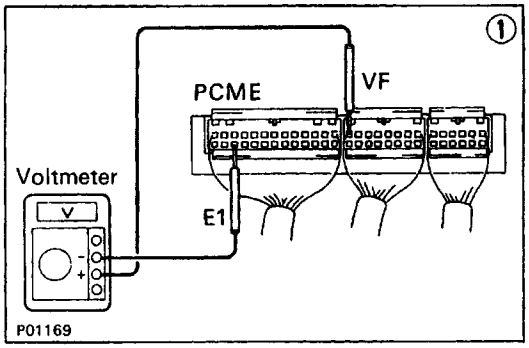
Fuse blows again

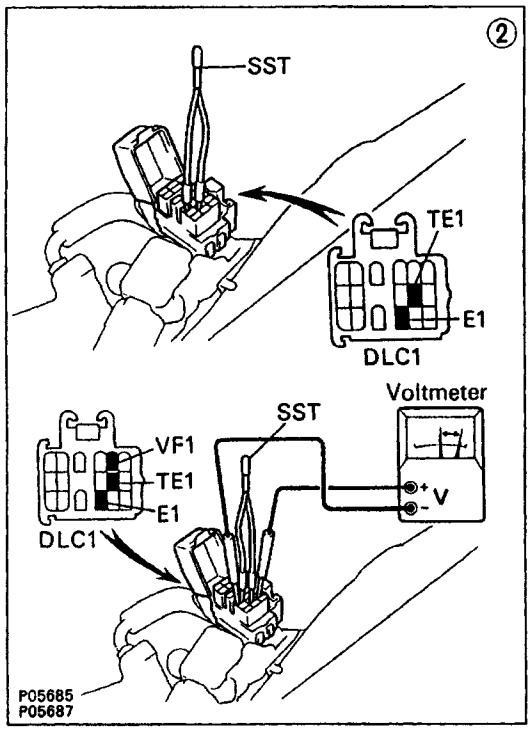
Check wiring between PCME terminal W and fuse.

→ BAD → Repair or replace.

V00930







(1) There is no voltage between PCME terminals VF and E1.

Check that there is specified between PCME terminal VF and body ground.

NO → OK: Check wiring between PCME terminal E1 and body ground.

- OK → Try another PCME.
- BAD → Repair or replace.

Check for suction of air into exhaust system.
- BAD → Repair air suction.
- OK ↓

Check for air leak from air intake system.
- BAD → Repair air leak.
- OK ↓

Check spark plugs.
- BAD → Repair or replace.
- OK ↓

Check distributor w/ ignition coil and ignition system.
- BAD → Repair or replace.
- OK ↓

Check fuel pressure.
- BAD → Repair or replace.
- OK ↓

Check injectors.
- BAD → Repair or replace.
- OK ↓

Check manifold absolute pressure sensor.
- BAD → Repair or replace.
- OK ↓

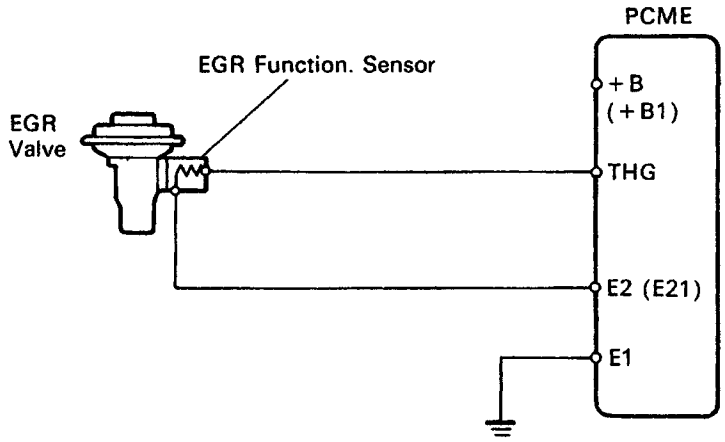
Check operation of oxygen sensors.
- OK → System normal.
- BAD ↓

Check wiring between oxygen sensors and PCME connectors.
- BAD → Repair wiring.
- OK ↓

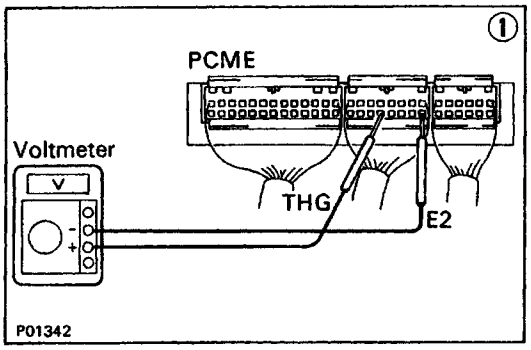
Repair oxygen sensors.

V00931

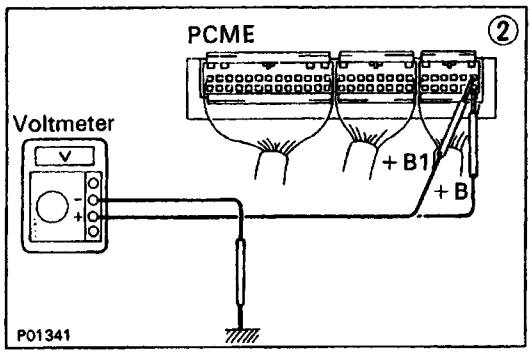
Calif. only



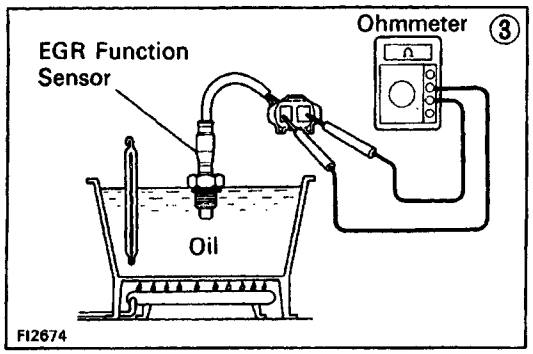
FI2680



P01342



P01341



FI2674

(1) There is no voltage between PCME terminals THG and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME terminal + B or + B1 and body ground. **(IG SW ON)**

OK → ↓

NO → Refer to No.1 (See page EG2–220)

↓

Check wiring between PCME terminal E1 and body ground.

OK → ↓

BAD → Repair or replace

↓

Check EGR system. (See page EG2–173)

BAD → Repair or replace.

↓ OK

(3) Check EGR function sensor. (See page EG2–321)

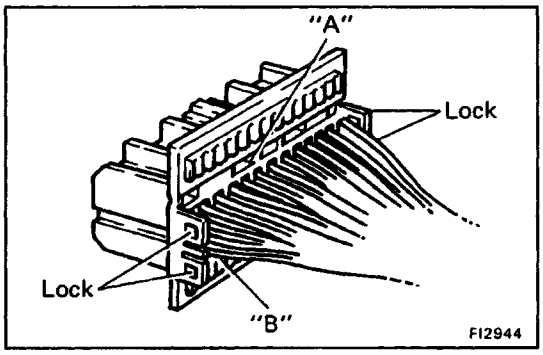
BAD → Replace EGR function sensor.

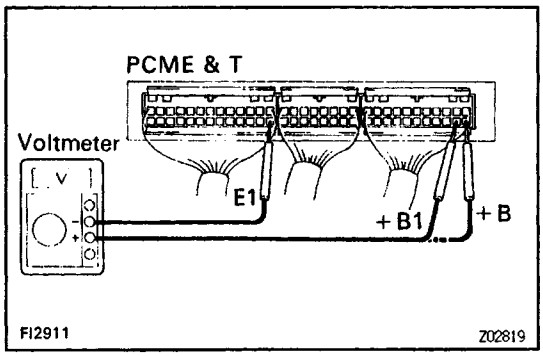
OK → Check wiring between PCME and EGR function sensor.

OK → Try another PCME.

BAD → Repair or replace.

V00932





SYSTEM CHECK PROCEDURE (A/T)

PREPARATION

(a) Disconnect the connectors from the PCME&T.

(b) Remove the locks as shown in the illustration so that the tester probe(s) can easily come in.

NOTICE: Pay attention to sections 'A' and 'B' in the illustration which can be easily broken.

(e) Reconnect the connectors to the PCME&T.

HINT:

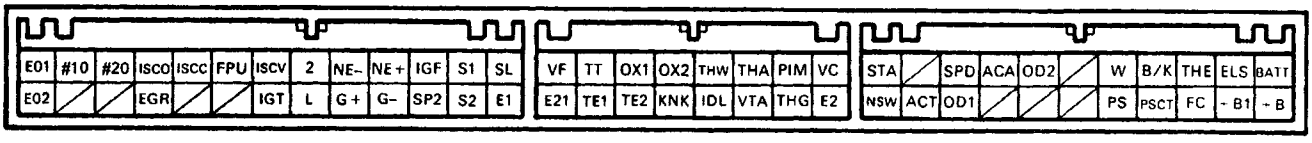
- Perform all voltage measurements with the connectors connected.
- Verify that the battery voltage is 1 1 V or more when the ignition switch is in the "ON" position.

Using a voltmeter with high impedance (10 kΩ/V minimum), measure the voltage at each terminal of the wiring connectors.

PCME & T Terminals (A/T)

Symbol	Terminal Name	Symbol	Terminal Name	Symbol	Terminal Name
E01	POWER GROUND	S1	ECT SOLENOID		–
E02	POWER GROUND	S2	ECT SOLENOID	ACT	A/C AMPLIFIER
#10	INJECTOR	SL	ECT SOLENOID	SP1	VSPG
	–	E1	ENGINE GROUND	OD1	OD OFF SWITCH
#20	INJECTOR	VF	DLC1	ACA	A/C AMPLIFIER
	–	E21	SENSOR GROUND		
ISCO	IDLE AIR CONTROL VALVE	TT	DLC1	OD2	OD MAIN SWITCH
EGR	EG R VSV	TE1	DLC1		–
ISCC	IDLE AIR CONTROL VALVE	OX1	OXYGEN SENSOR		
	–	TE2	DLC1		–
FPU	FUEL PRESSURE VSV	*OX2	SUB–OXYGEN SENSOR	W	WARNING LIGHT
	–	KNK	KNOCK SENSOR	PS	PS CONTROL MODULE
ISCV	A/C IDLE–UP VSV	THW	ECTS	B/K	STOP LIGHT SWITCH
IGT	IGNITER	IDL	THROTTLE POSITION SENSOR	PSCT	PS CONTROL MODULE
2	PARK/NEUTRAL SWITCH	THA	INTAKE AIR TEMP.SENSOR	THE	EVAPORATOR TEMP. SENSOR
L	PARK/NEUTRAL SWITCH	VTA	THROTTLE POSITION SENSOR	FC	CIRCUIT OPENING RELAY
NE–	DISTRIBUTOR	PIM	MAP	ELS	TAILLIGHT RELAY DEFOGGER SWITCH
G+	DISTRIBUTOR	*THG	EGR FUNCTION SENSOR	+B	MPI MAIN RELAY
NE+	DISTRIBUTOR	VC	MAP THROTTLE POSITION SENSOR	BATT	BATTERY
G–	DISTRIBUTOR	E2	SENSOR GROUND	+B1	MPI MAIN RELAY
IGF	IGNITER	STA	STARTER SWITCH	* Calif. only	
SP2	VSPG	NSW	PARK/NEUTRAL SWITCH		

PCME & T Terminals



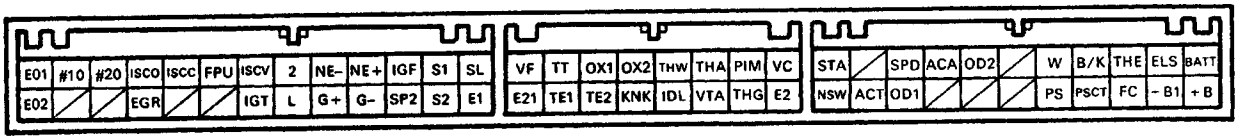
FI2796

V00946

PCME & T Wiring Connectors Voltage (A/T)

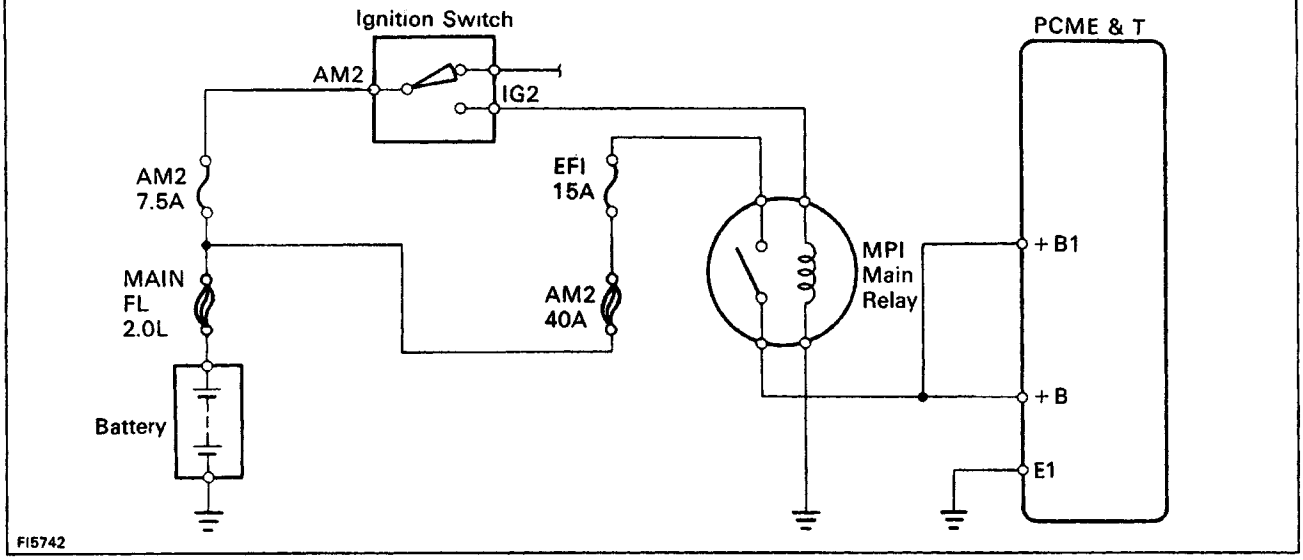
No.	Terminals	Condition		STD voltage (V)	See page
1	+B +B1 – E1	IG SW ON		9 – 14	EG2–236
2	BATT – E1	—		9 – 14	EG2–237
3	IDL – E2	IG SW ON	Throttle valve open	9 – 14	EG2–238
	VC – E2		—	4.5 – 5.5	
	VTA – E2		Throttle valve fully closed (Throttle opener must be cancelled first)	0.3 – 0.8	
			Throttle valve fully open	3.2 – 4.9	
4	PIM – E2	IG SW ON		3.3 – 3.9	EG2–240
	VC – E2			4.5 – 5.5	
5	#10 – E01 #20 – E02			9 – 14	EG2–241
6	THA – E2	IG SW ON	Intake air temp. 20°C (68°F)	0.5 – 3.4	EG2–242
7	THW – E2		Coolant temp. 80°C (176°F)	0.2 – 1.0	EG2–243
8	STA – E1	Cranking		6 or more	EG2–244
9	IGT – E1	Idling		Pulse generation	EG2–245
10	ISCO – E1	IG SW ON		9 – 14	EG2–246
11	W – E1	No trouble ("CHECK" engine warning light off) and engine running		9 – 14	EG2–247

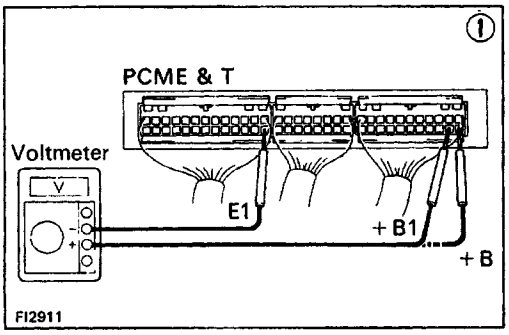
PCME & T Terminals

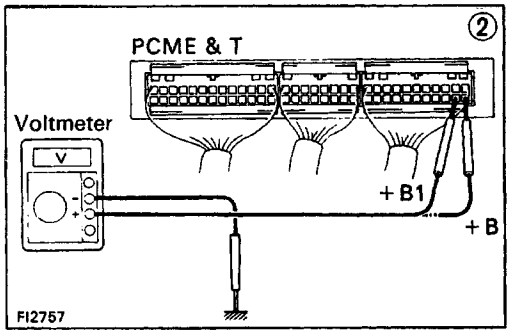


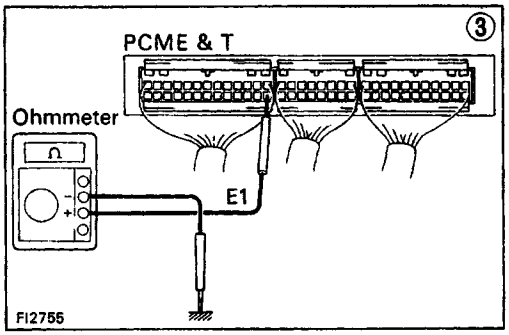
F12796

No.	Terminals	Trouble	Condition	STD voltage
1	+B, +B1 – E1	No voltage	IG SW ON	9 – 14 V









(1) There is no voltage between PCME & T terminals +B or +B1 and E1. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal + B or +B1 and body ground. **(IG SW ON)**

NO → OK

(3) Check wiring between PCME & T terminal E1 and body ground.

OK → Try another PCME & T.

BAD → Repair or replace.

Check fuses, H–fuse, fusible link and ignition switch.

BAD → Repair or replace.

OK ↓

Check MPI main relay. (See page EG2–302)

BAD → Replace.

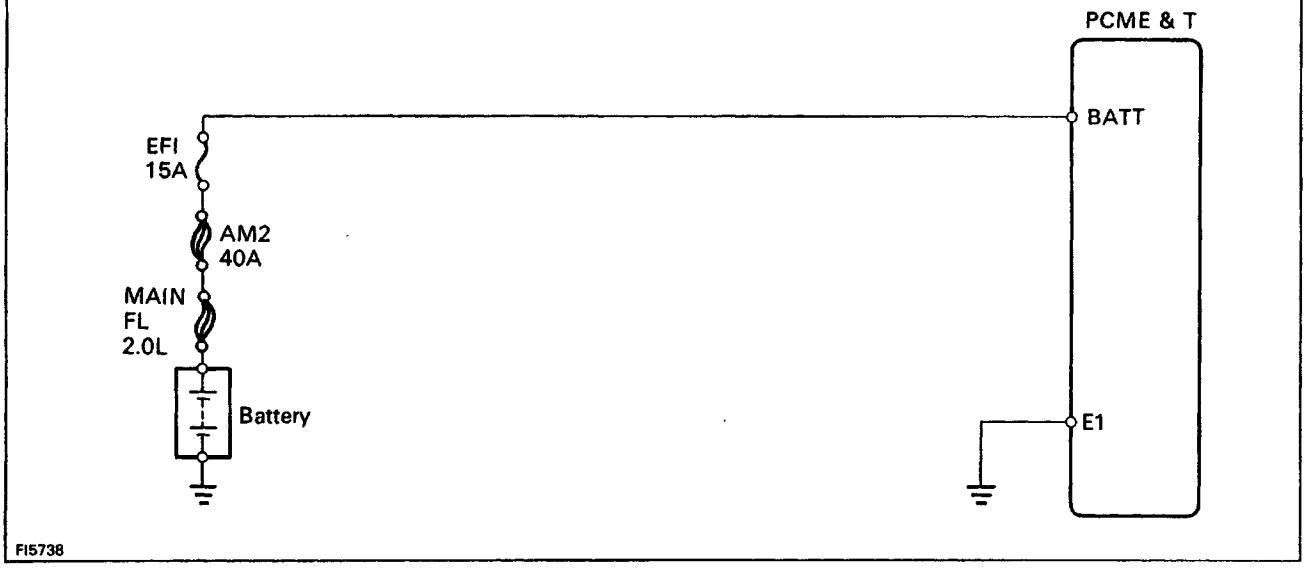
OK ↓

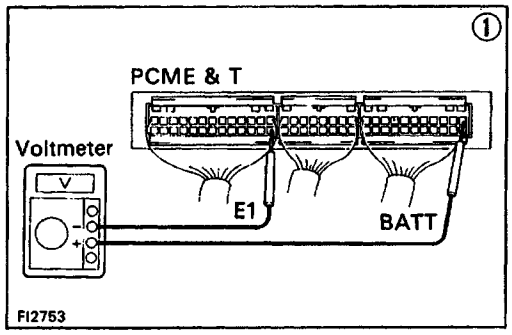
Check wiring between MPI main relay and battery.

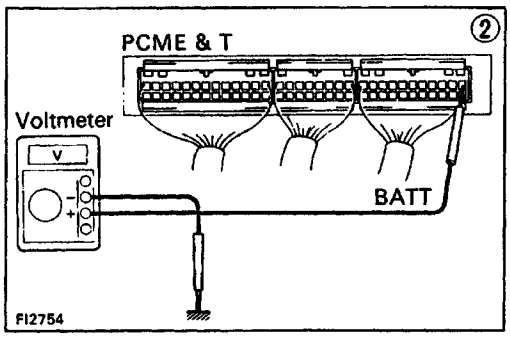
BAD → Repair or replace.

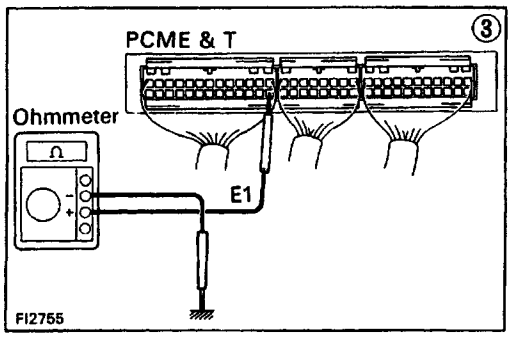
V00934

No.	Terminals	Trouble	Condition	STD voltage
2	BATT – E1	No voltage	–	9 – 14 V









(1) There is no voltage between PCME & T terminals BATT and E1.

↓

(2) Check that there is voltage between PCME & T terminal BATT and body ground.

NO → OK

(3) Check wiring between PCME & T terminal E1 and body ground.

OK → Try another PCME & T.

BAD → Repair or replace.

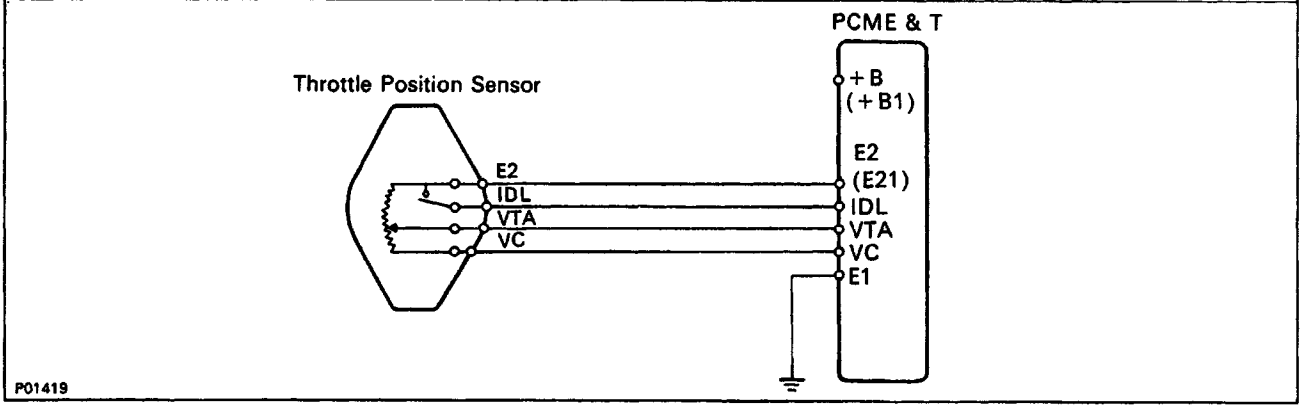
Check fuse, H–fuse and fusible link. BAD → Replace.

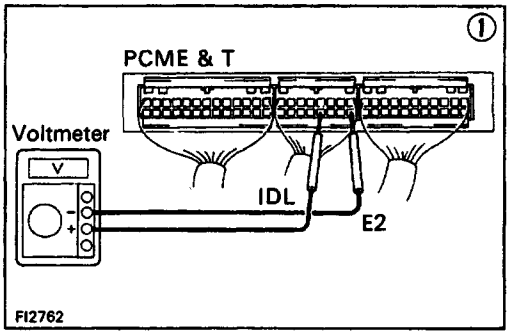
OK ↓

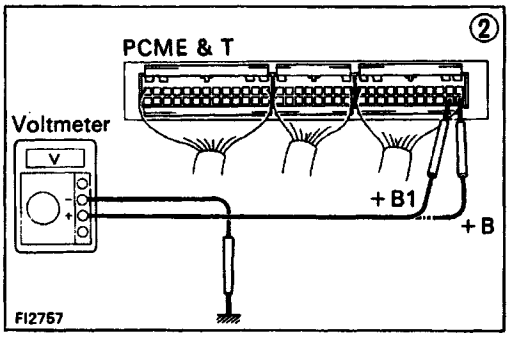
Check wiring between PCME & T terminal and battery. BAD → Repair or replace.

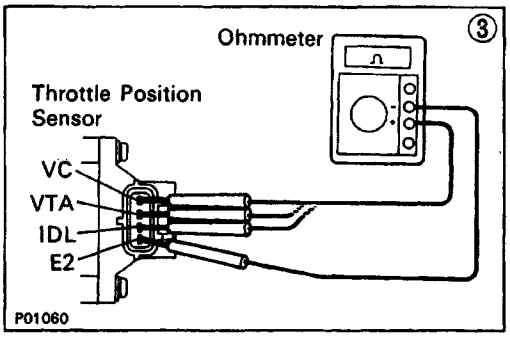
V00950

No.	Terminals	Trouble	Condition		STD voltage
3	IDL – E2	No voltage	IG SW ON	Throttle valve open	9 – 14 V
	VC – E2			–	4.5 – 5.5 V
	VTA – E2			Throttle valve fully closed Throttle opener must be .(cancelled first	0.3 – 0.8 V
				Throttle valve fully open	3.2 – 4.9 V









- **IDL– E2**

(1) There is no voltage between PCME & T terminals IDL and E2. **(IG SW ON)** (Throttle valve open)

↓

(2) Check that there is voltage between PCME & T terminal + B (+B1) and body ground. **(IG SW ON)**

NO / OK

OK → Check wiring between PCME & T terminal E1 and body ground.

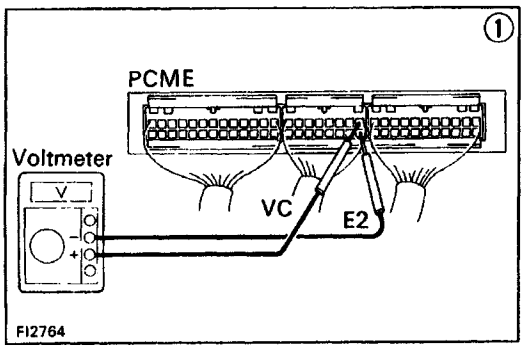
Check wiring between PCME & T terminal E1 and body ground.
- OK → Try another PCME & T.
- BAD → Repair or replace.

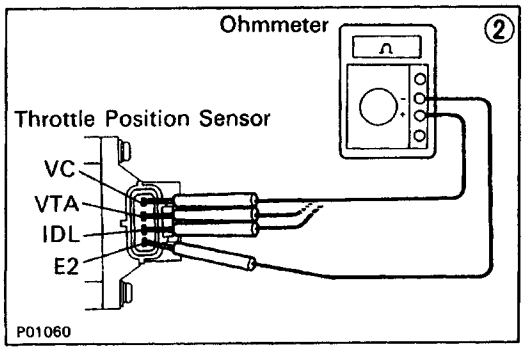
NO → Refer to No.1. (See page EG2–236)
- BAD → Repair or replace.
- OK → (3) Check throttle position sensor. (See page EG2–288)

(3) Check throttle position sensor. (See page EG2–288)
- BAD → Repair or replace throttle position sensor.
- OK → Check wiring between PCME & T and throttle position sensor.

Check wiring between PCME & T and throttle position sensor.
- OK → Try another PCME & T.
- BAD → Repair or replace.

V00935





• VC–E2

(1) There is no voltage between PCME & T terminals VC and E2. **(IG SW ON)**

↓

Check that there is voltage between PCME & T terminal + B (+ B1) and body ground. **(IG SW ON)**

↓ OK

(2) Check throttle position sensor. (See page EG2–288)

↓ BAD

Repair or replace.

↓ OK

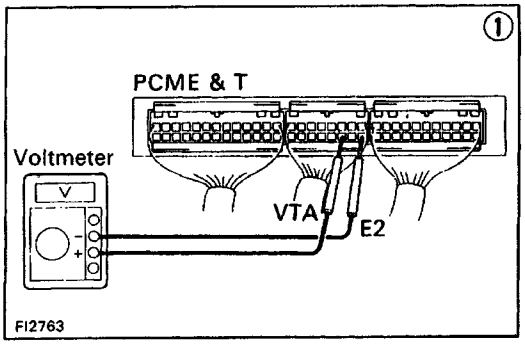
Check wiring between PCME & T and throttle position sensor.

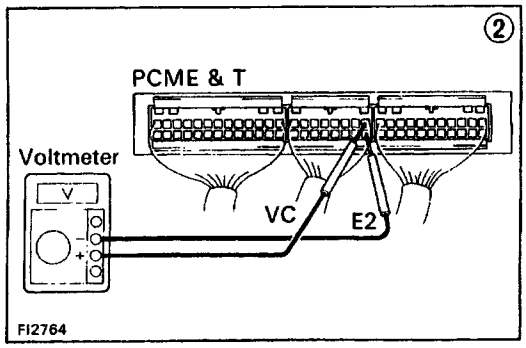
↓ OK

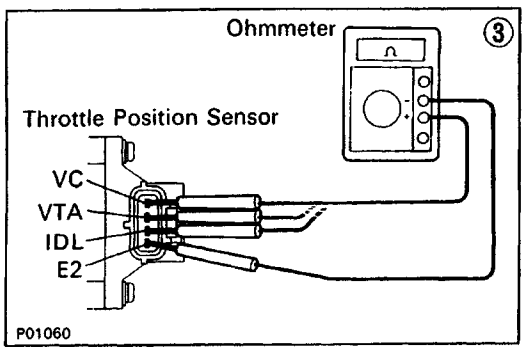
Try another PCME & T.

NO → Refer to No–1 (See page EG2–236)

BAD → Repair or replace wiring







• VTA – E2

(1) There is no specified voltage at PCME & T terminals VTA and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminals VC and E2. **(IG SW ON)**

NO → Refer to VC–E2 trouble section.

↓ OK

OK → (3) Check throttle position sensor. (See page EG2–288)

BAD → Repair or replace.

↓ OK

Check wiring between PCME & T and throttle position sensor.

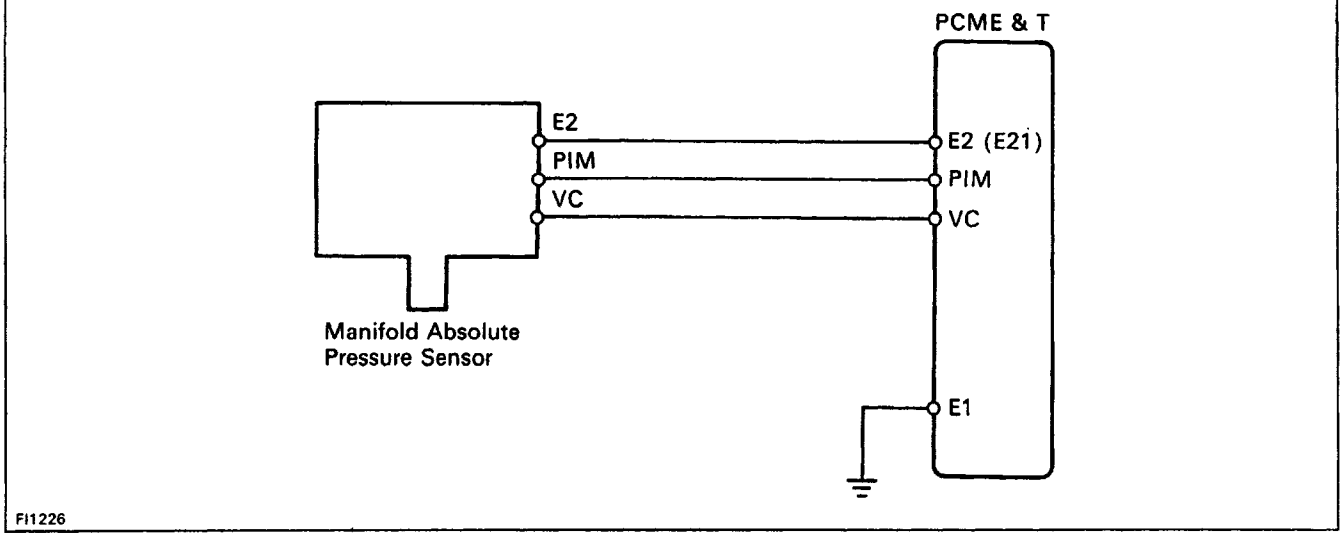
BAD → Repair or replace.

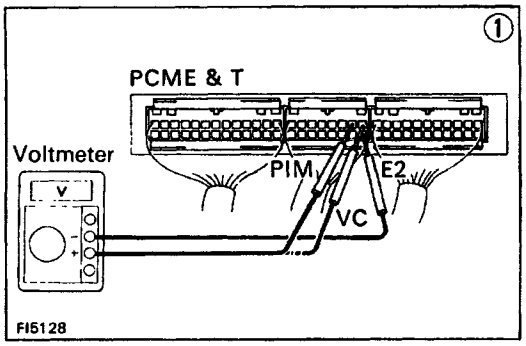
↓ OK

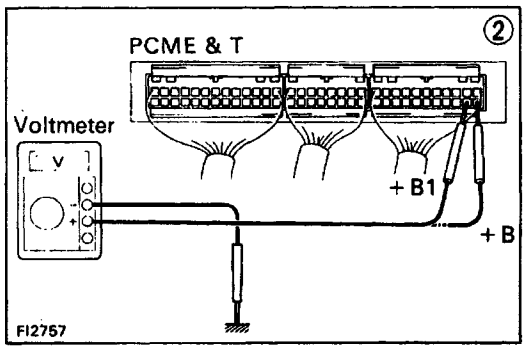
Try another PCME & T.

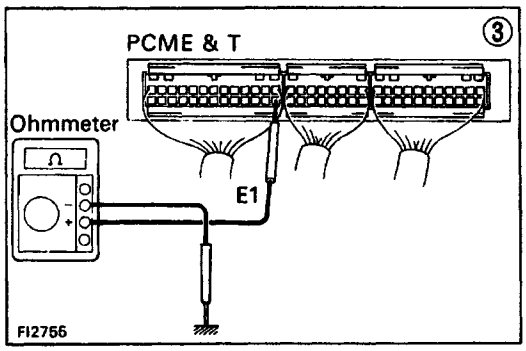
V00936

No.	Terminals	Trouble	Condition	STD voltage
4	PIM – E2	No voltage	IG SW ON	3.3 – 3.9 V
	VC – E2			4.5 – 5.5 V









(1) There is no voltage between PCME & T terminals PIM or VC and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal + B (+ B1) and body ground. **(IG SW ON)**

OK → ↓

NO → Refer to No.1 (See page EG2–236)

↓

(3) Check wiring between PCME & T terminal E1 and body ground.

OK → ↓

BAD → Repair or replace.

Check manifold absolute pressure (See page EG2–319)

BAD → Replace manifold absolute pressure sensor.

OK → ↓

Check wiring between PCME & T and manifold absolute pressure sensor.

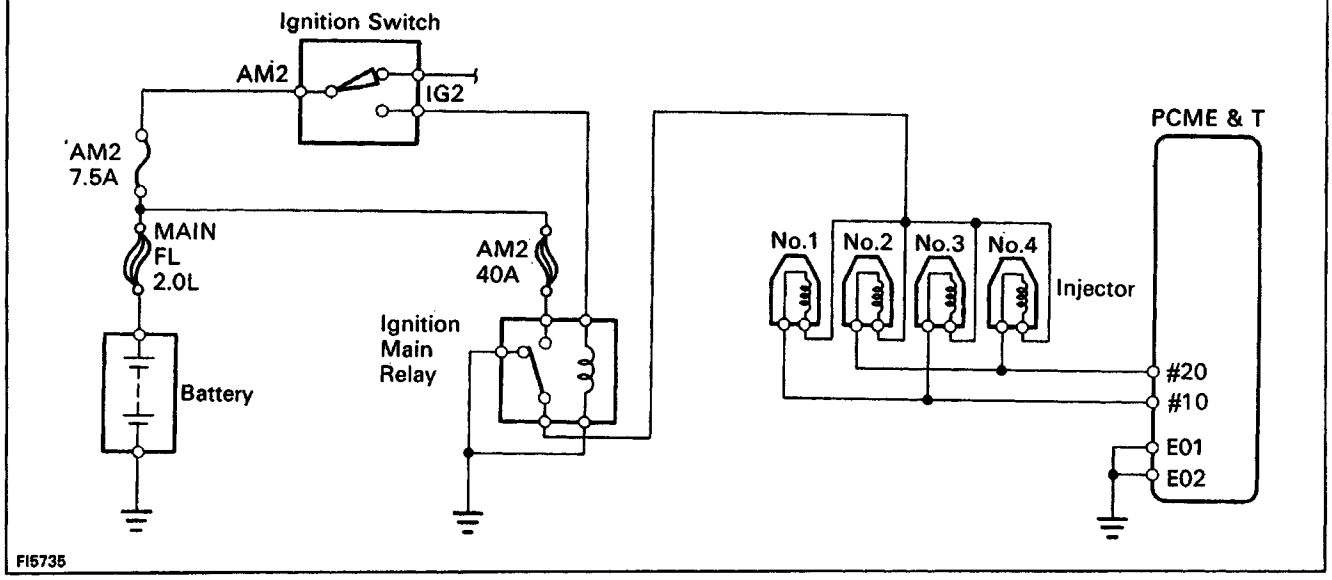
OK → ↓

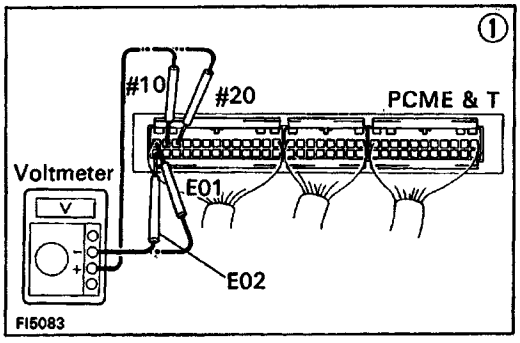
BAD → Repair or replace.

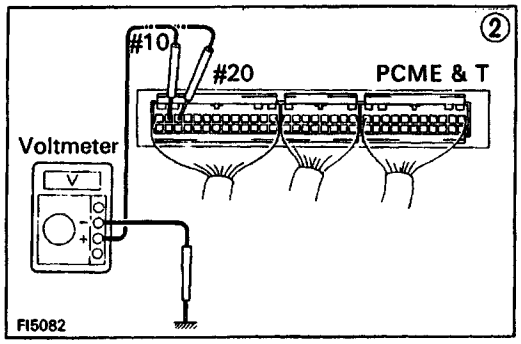
Try another PCME & T.

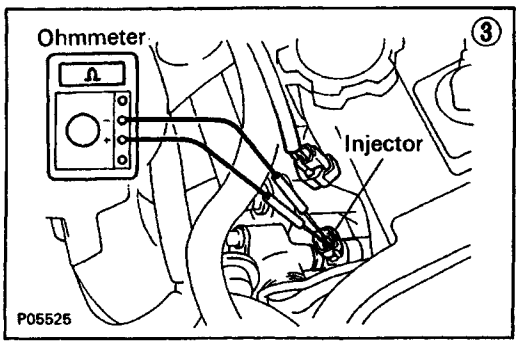
V00937

No.	Terminals	Trouble	Condition	STD voltage
5	#10 – E01 #20 – E02	No voltage	IG SW ON	9 – 14 V









(1) There is no voltage between PCME & T terminals #10 and/or # 20 and E01 and/or E02. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal #10 and/or #20 and body ground.

NO → OK

Check wiring between PCME & T terminal E01 and/or E02 and body ground.

OK → Try another PCME & T.

BAD → Repair or replace.

Check fuse, H–fuse, fusible link and ignition switch and ignition main relay. BAD → Repair or replace.

OK ↓

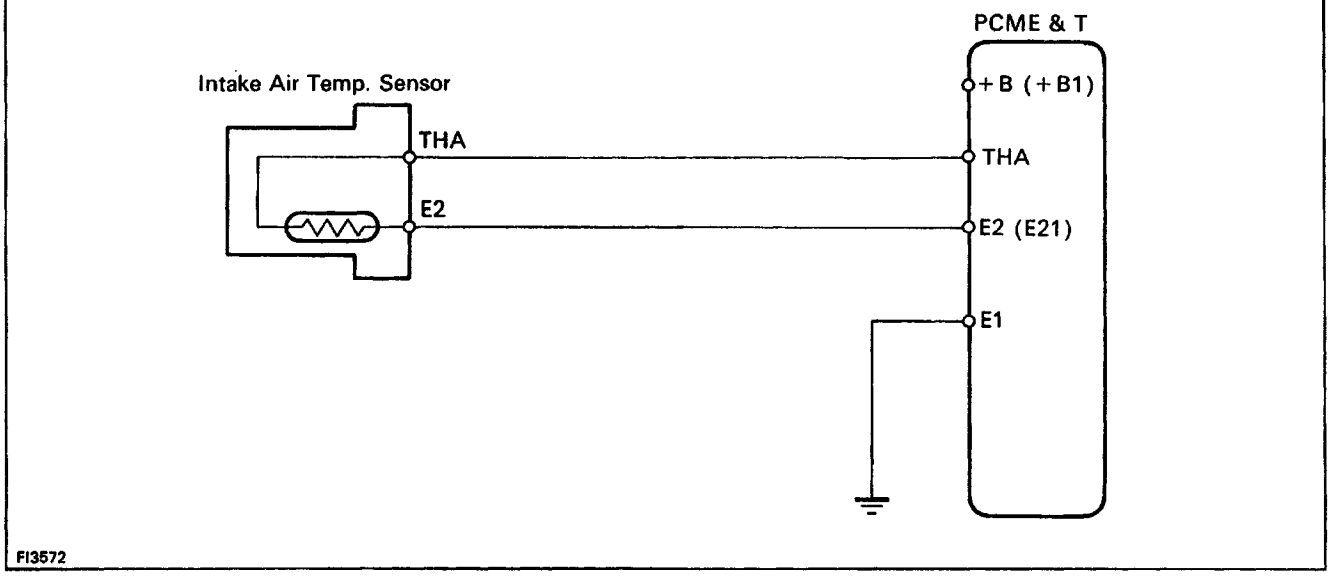
(3) Check resistance of each injector.
STD resistance: Approx. 13.8Ω

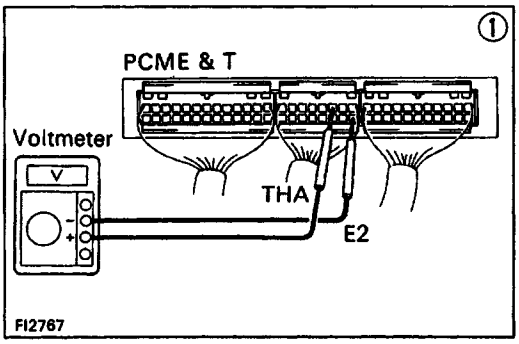
OK → Check wiring between PCME & T terminal No.10 and/or No.20 and battery. BAD → Repair or replace.

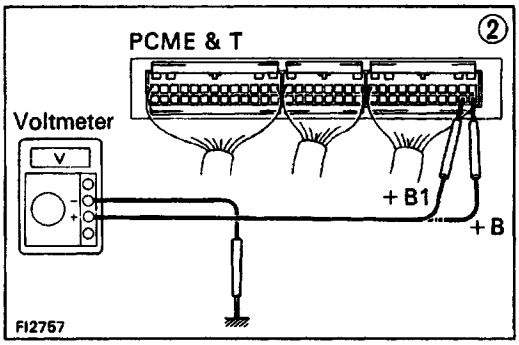
OK → Repair injector.

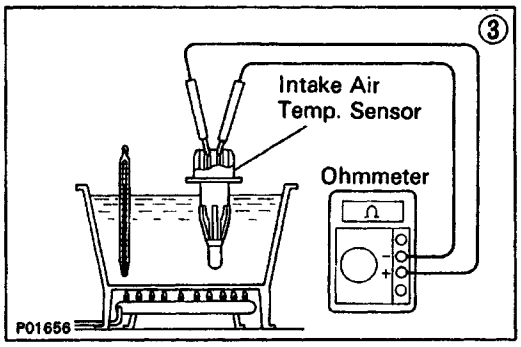
V00938

No.	Terminals	Trouble	Condition		STD voltage
6	THA – E2	No voltage	IG SW ON	Intake air temperature 20°C (68°F)	0.5 – 3.4 V









(1) There is no voltage between PCME & T terminals THA and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal + B or +B and body ground. **(IG SW ON)**

OK → ↓

NO → Refer to No.1 (See page EG2–236)

↓

Check wiring between PCME & T terminal E1 and body ground.

OK → ↓

BAD → Repair or replace.

↓

(3) Check intake air temp. sensor. (See page EG2–306)

BAD → Replace intake air temp. sensor.

OK → ↓

Check wiring between PCME & T and air temp. sensor.

OK → ↓

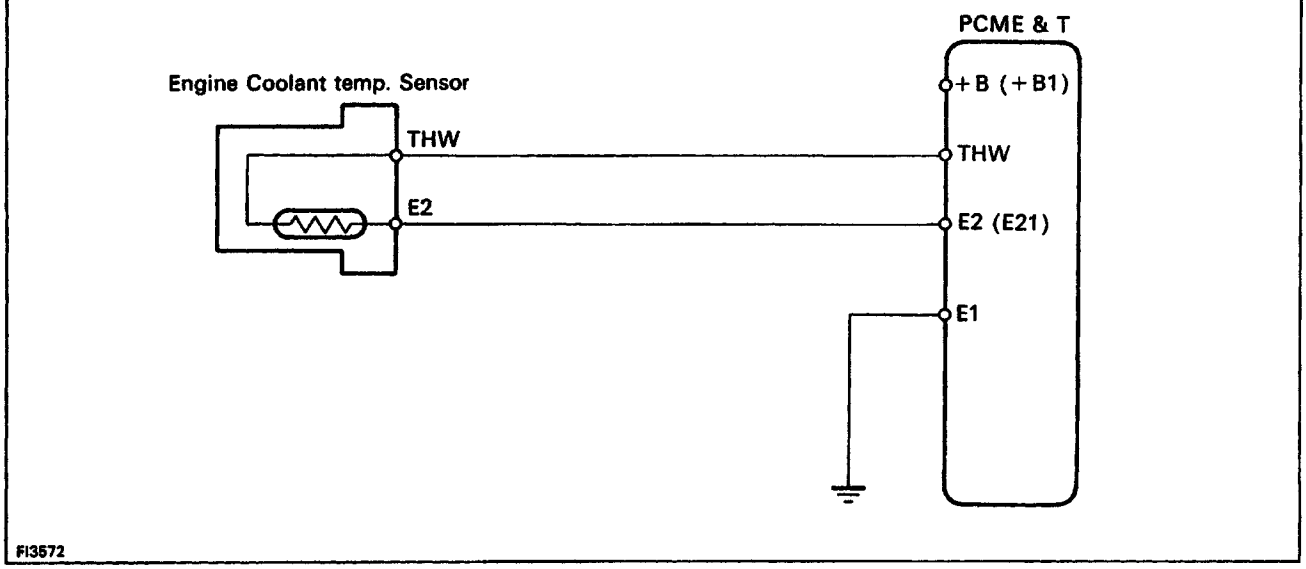
BAD → Repair or replace.

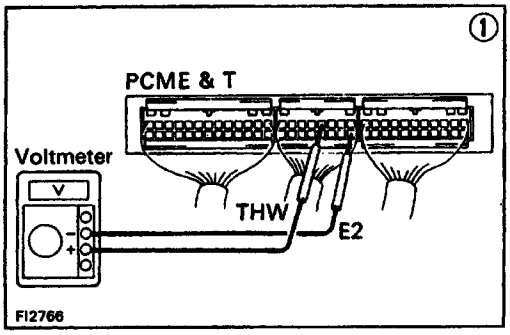
↓

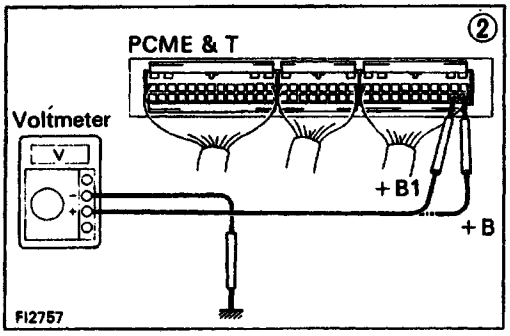
Try another PCME & T.

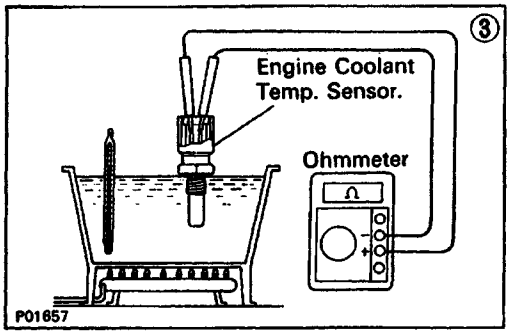
V00939

No.	Terminals	Trouble	Condition		STD voltage
7	THW – E2	No voltage	IG SW ON	Coolant temperature 80°C (176°F)	0.2 – 1.0 V









(1) There is no voltage between PCME & T terminals THW and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal +B or +B and body ground. (IG SW ON)

OK → ↓

NO → Refer to No.1 (See page EG2–236)

↓

Check wiring between PCME & T terminal E1 and body ground.

OK → ↓

BAD → Repair or replace.

(3) Check engine coolant temp. sensor (See page EG2–305)

BAD → Replace engine coolant temp. sensor.

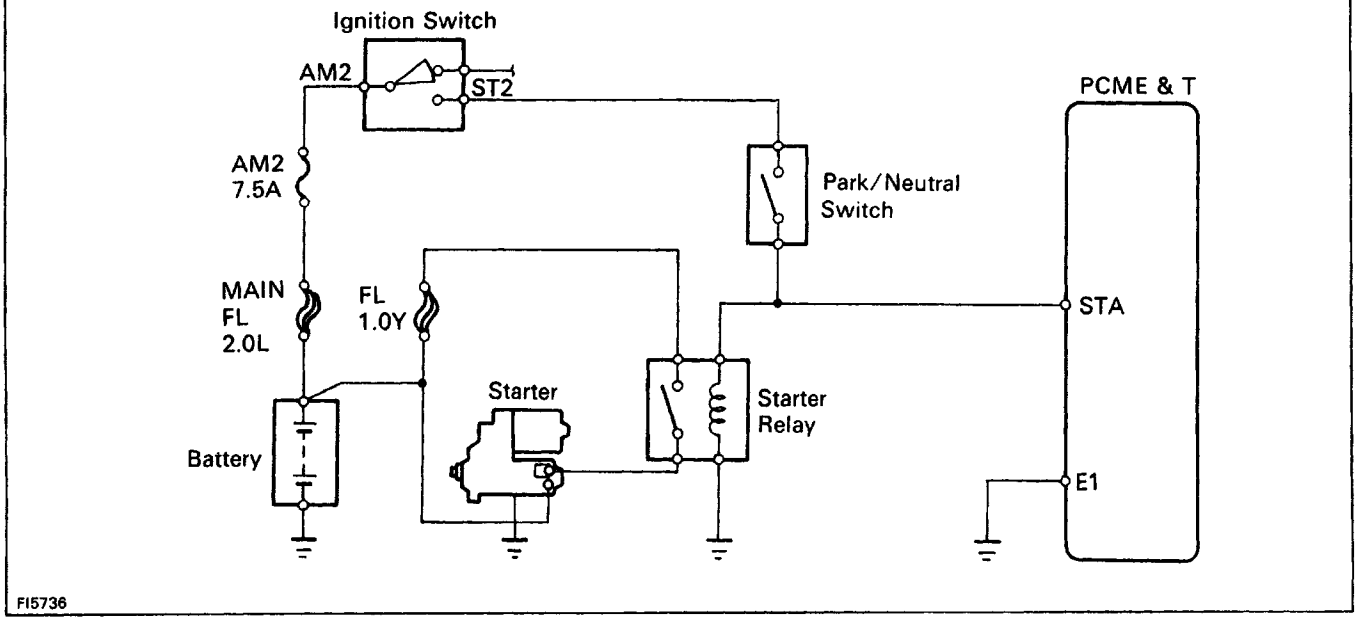
OK → Check wiring between PCME & T and engine coolant temp. sensor.

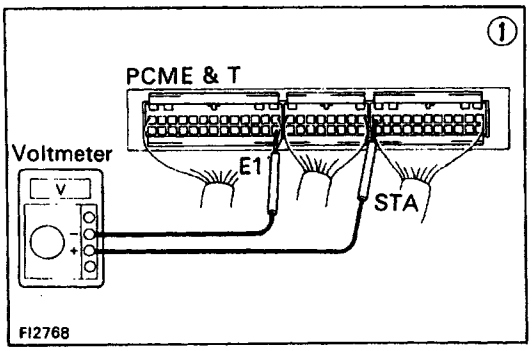
OK → Try another PCME & T.

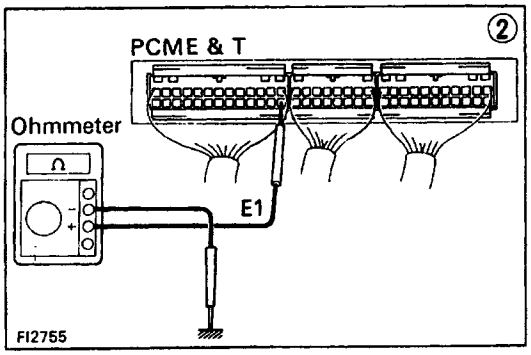
BAD → Repair or replace.

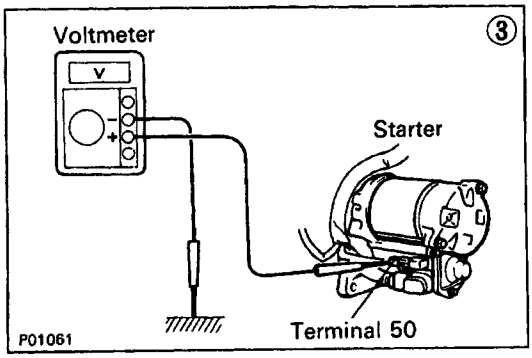
V00940

No.	Terminals	Trouble	Condition	STD voltage
8	STA – E1	No voltage	Cranking	6 V or more









(1) There is no voltage between PCME & T terminals STA and E1.
(IG SW START)

Check starter operation. — OK → Check wiring between PCME & T terminal STA and ignition switch terminal ST2.

Check starter operation. — BAD → Check wiring between PCME & T terminal STA and ignition switch terminal ST2. — BAD → Repair or replace.

Check wiring between PCME & T terminal STA and ignition switch terminal ST2. — OK → (2) Check wiring between PCME & T terminal E1 and body ground.

(2) Check wiring between PCME & T terminal E1 and body ground.
- → Try another PCME & T.
- → Repair or replace.

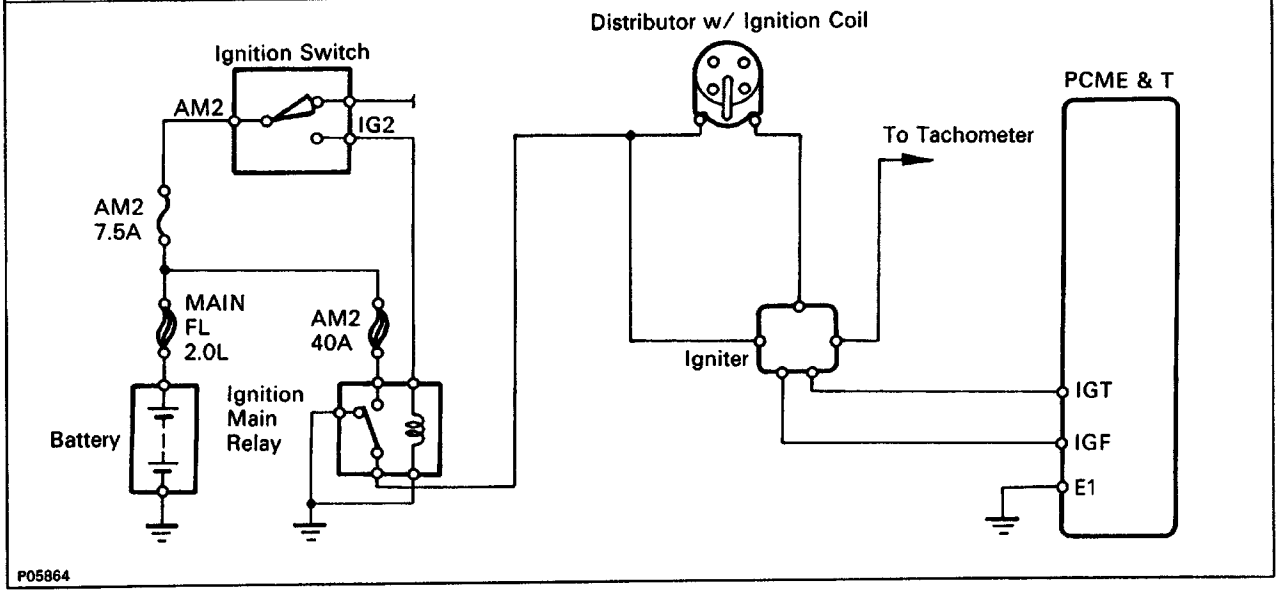
Check fuse, H–fuse, fusible link, battery, wiring ignition switch and park/neutral switch. — BAD → Repair or replace.

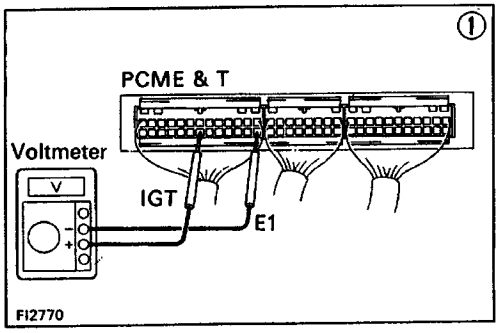
Check fuse, H–fuse, fusible link, battery, wiring ignition switch and park/neutral switch. — OK → (3) Check that there is voltage at starter terminal 50.
(IG SW ON) STD voltage: 6 V or more

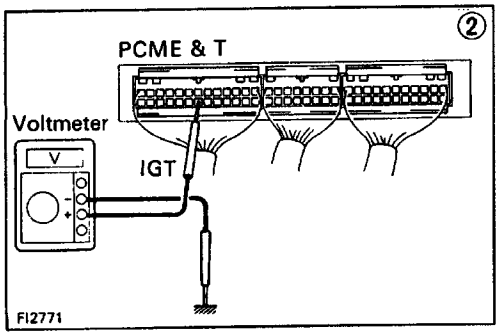
(3) Check that there is voltage at starter terminal 50.
(IG SW ON) STD voltage: 6 V or more
- OK → Check starter.
- NO → Check wiring between ignition switch terminal ST2 and starter and starter terminal 50.

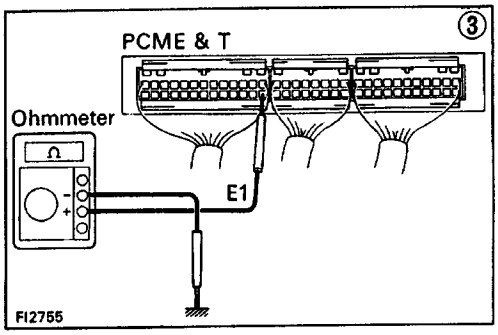
V00941

No.	Terminals	Trouble	Condition	STD voltage
9	IGT – E1	No voltage	Idling	Pulse generation









(1) There is no voltage between PCME & T terminals IGT and E1. **(Idling)**

↓

(2) Check that thee is voltage between PCME & T terminal IGT and body ground. **(Idling)**

NO → OK

(3) Check wiring between PCME & T terminal E1 and body ground. — BAD → Repair or Replace.

OK → Try another PCME & T.

↓

Check fuse, H–fuse, fusible link, ignition switch and ignition main relay. — BAD → Repair or replace.

OK ↓

Check distributor. (See IG section) — BAD → Repair or replace.

OK ↓

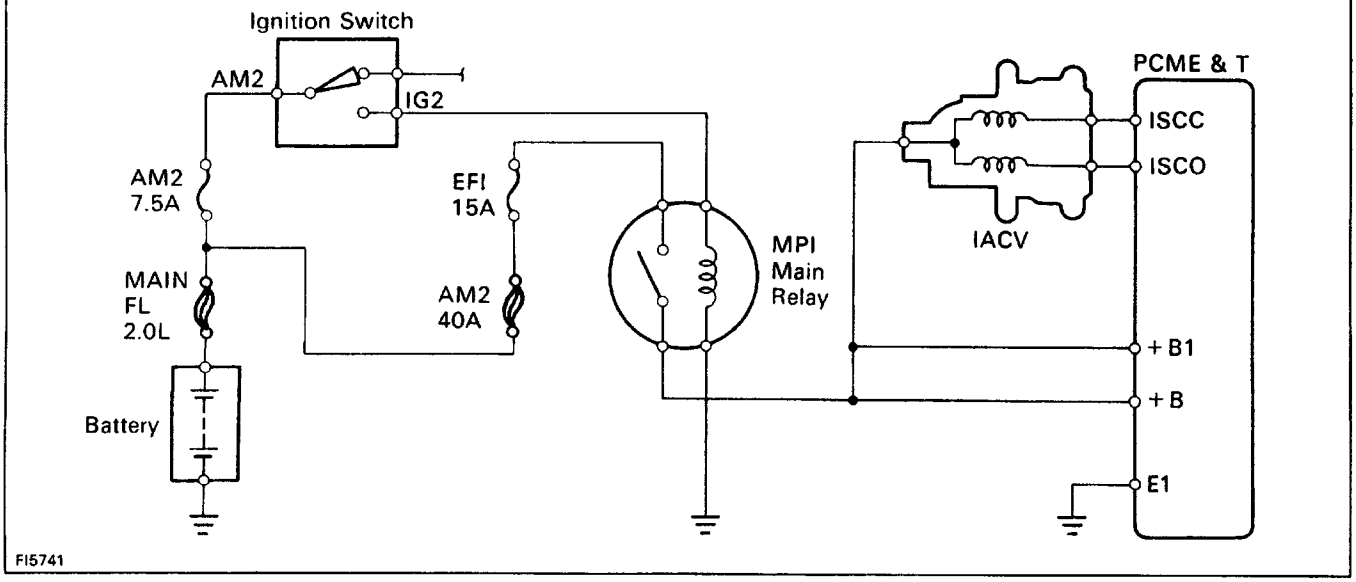
Check wiring between PCME & T and battery. — BAD → Repair or replace.

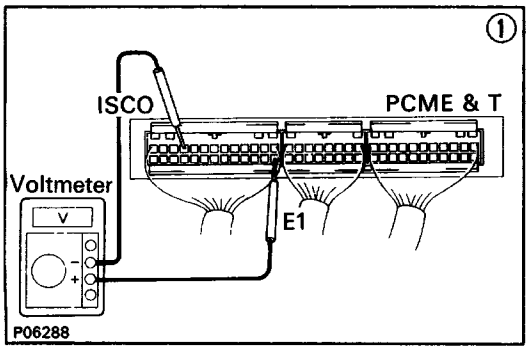
OK ↓

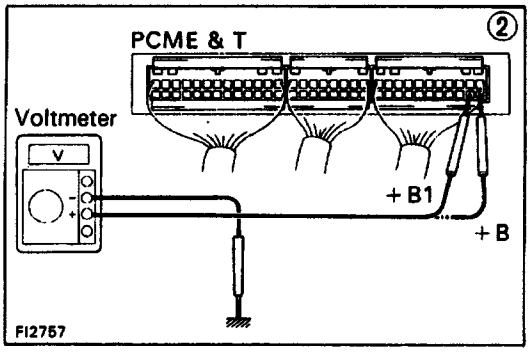
Check igniter. (See IG section) — BAD → Repair or replace.

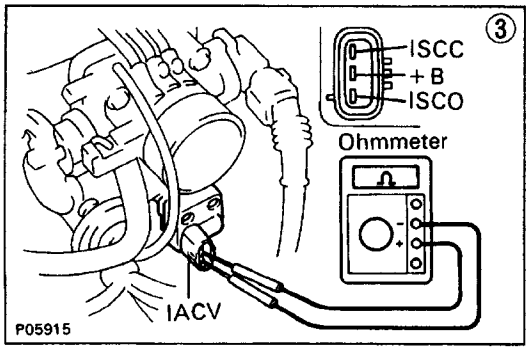
V00942

No.	Terminals	Trouble	Condition	STD voltage
10	ISCO – E1	No voltage	IG SW ON	9 – 14 V









(1) There is no voltage between PCME & T terminals ISCO and E1. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal +B or +B and body ground. **(IG SW ON)**

OK ↓

NO → Refer to No.1. (See page EG2–236)

↓

(3) Check resistance between IACV terminals +B and ISCC or ISCO. **STD resistance: 19.3 – 22.3Ω**

BAD → Replace IACV.

OK ↓

Check wiring between PCME & T and IACV.

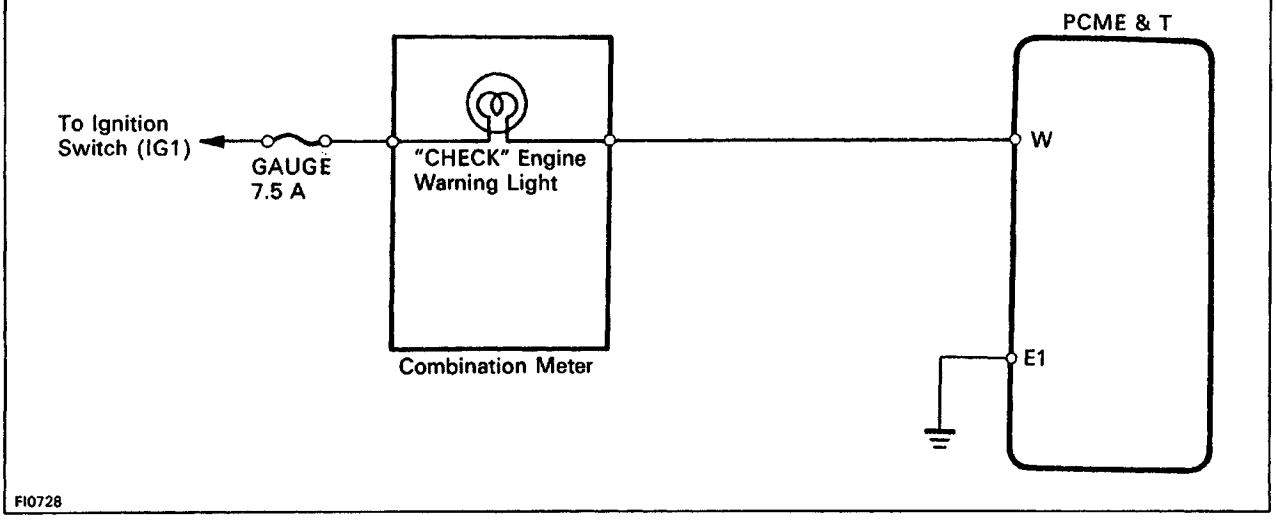
BAD → Repair or replace wiring.

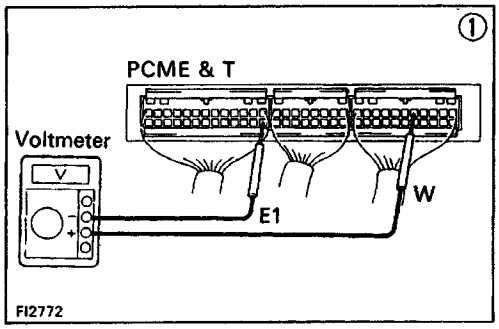
OK ↓

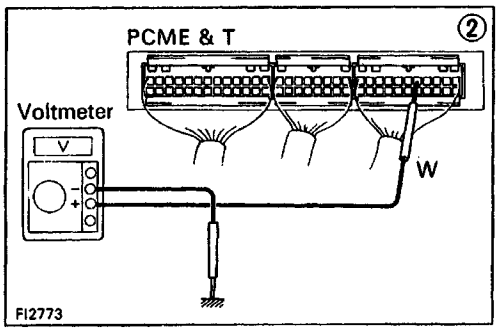
Try another PCME & T.

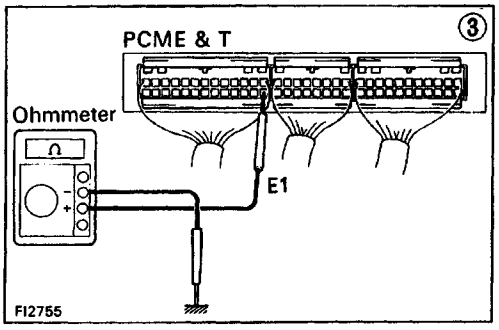
V00943

No.	Terminals	Trouble	Condition	STD voltage
11	W – E1	No voltage	No trouble ("CHECK" engine warning light off) and engine running.	9 – 14 V









(1) There is no voltage between PCME & T terminals W and E1. **(Idling)**

↓

(2) Check that there is voltage between PCME & T terminal W and body ground.

NO → OK

(3) Check wiring between PCME & T terminal E1 and body ground.

OK → Try another PCME & T.

BAD → Repair or replace.

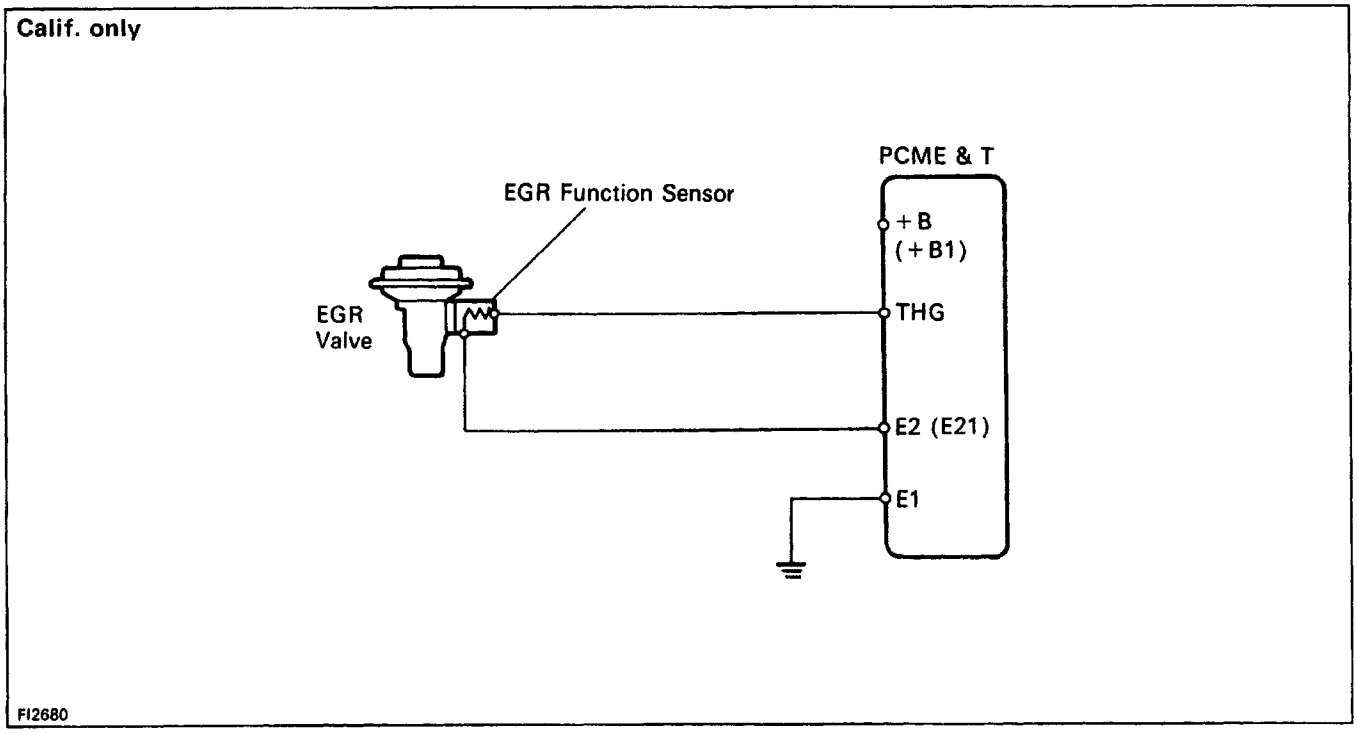
Check GAUGE fuse (7.5 A) and check engine warning light.

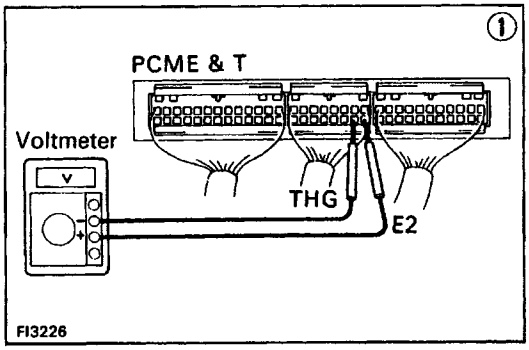
OK → BAD → Repair or replace.

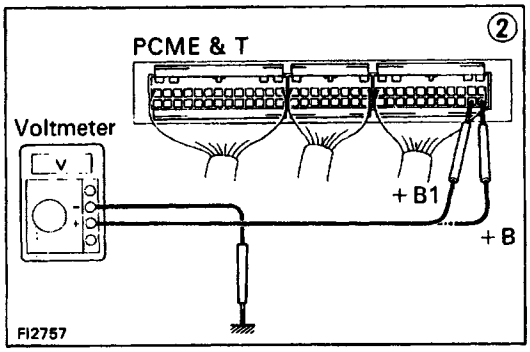
Fuse blows again

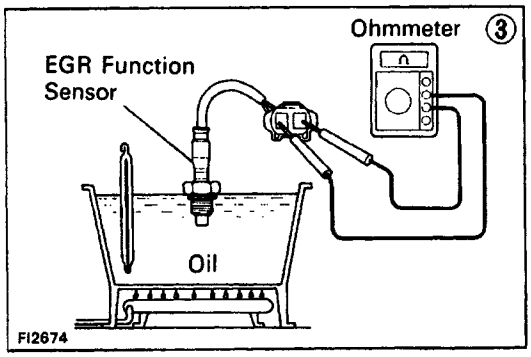
Check wiring between PCME & T terminal W and fuse. → BAD → Repair or replace.

V00944









(1)There is no voltage between PCME & T terminals THG and E2. **(IG SW ON)**

↓

(2) Check that there is voltage between PCME & T terminal + B or +B and body ground. **(IG SW ON)**

OK ↓ / NO → Refer to No.1 (See page EG2–236)

↓

Check wiring between PCME & T terminal E1 and body ground.

OK ↓ / BAD → Repair or replace.

↓

Check EGR system. (See page EG2–173) — BAD → Repair or replace.

OK ↓

Check EGR function sensor. (See page EG2–321)

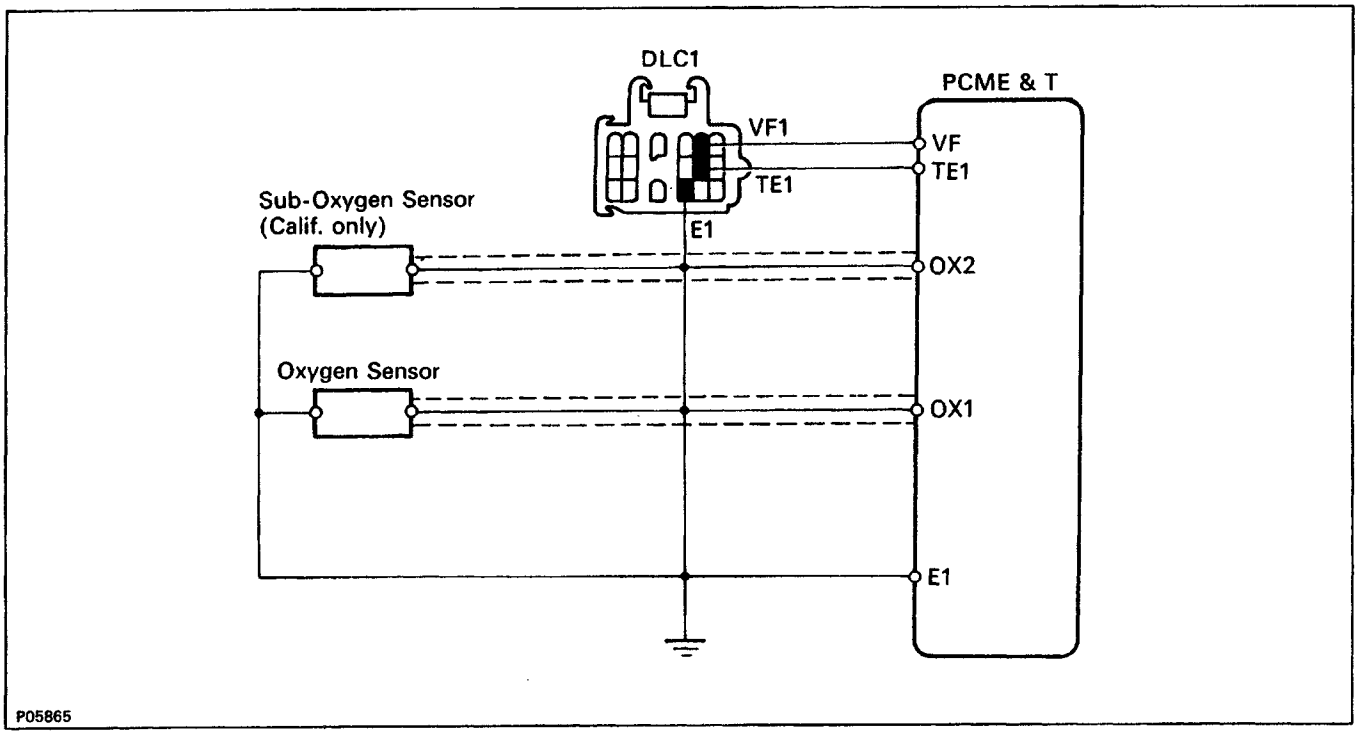
BAD → Replace EGR function sensor.

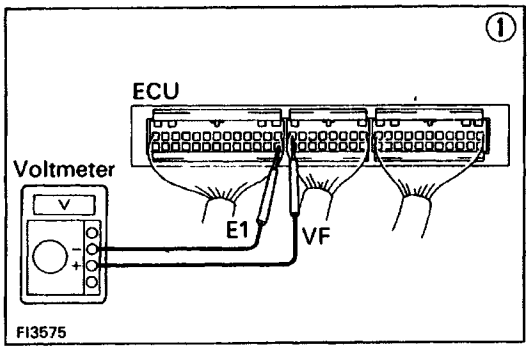
OK → Check wiring between PCME & T and EGR sensor.

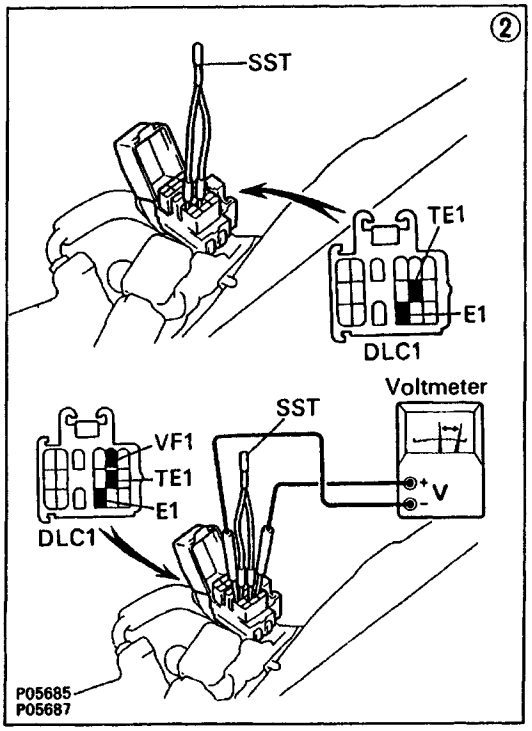
OK → Try another PCME & T.

BAD → Repair or replace.

V00948







(1) There is no voltage between PCME & T terminals VF and E1.

Check that there is specified voltage between PCME & T terminal VF and body ground.

NO → OK: Check wiring between PCME & T terminal E1 and body ground.

OK → Try another PCME & T.

BAD → Repair or replace.

Check for suction of air into exhaust system. BAD → Repair air suction.

OK

Check for air leak from air intake system. BAD → Repair air leak.

OK

Check spark plugs. BAD → Repair or replace.

OK

Check distributor w/ ignition coil and ignition system. BAD → Repair or replace.

OK

Check fuel pressure. BAD → Repair or replace.

OK

Check injectors. BAD → Repair or replace.

OK

Check manifold absolute pressure sensor. BAD → Repair or replace.

OK

Check operation of oxygen sensors. OK → System normal.

BAD

Check wiring between oxygen sensors and PCME & T connectors. BAD → Repair wiring

OK

Repair oxygen sensors.

V00949