

BODY ELECTRICAL SYSTEM

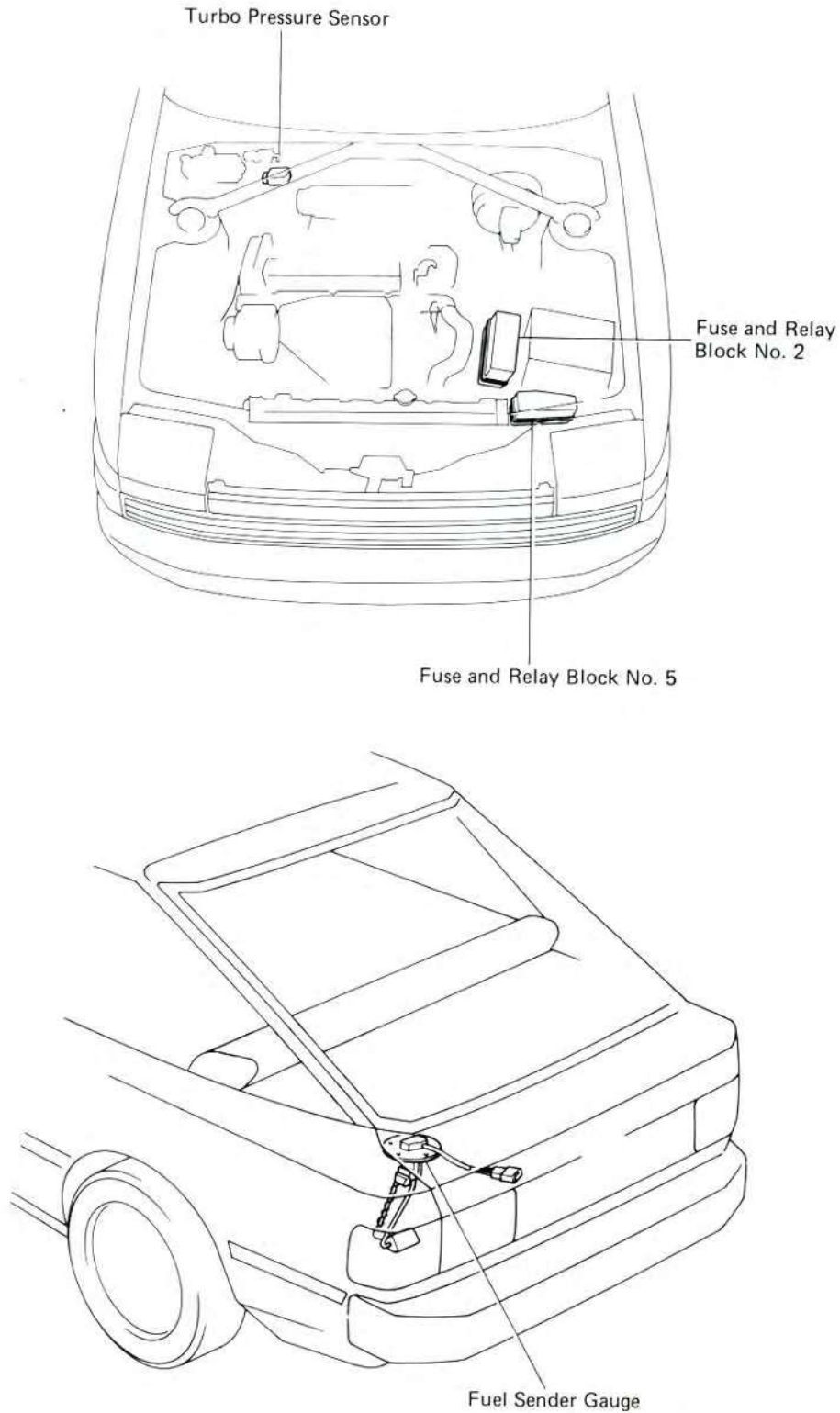
REFER TO 1988 CELICA REPAIR MANUAL (Pub. No. RM071U)

NOTE: The following pages contain only the points which differ from the above listed manual.

	Page
LOCATION OF SWITCHES AND RELAYS	BE-2
LIGHTING	BE-4
INSTRUMENTS, GAUGES AND WARNING	
LIGHTS	BE-5
AUDIO SYSTEM	BE-9

BE-2

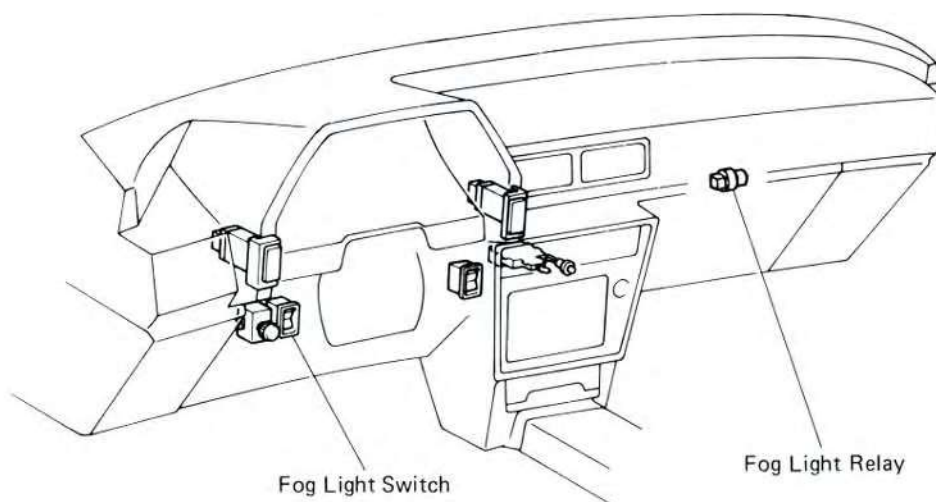
BODY ELECTRICAL SYSTEM — Location of Switches and Relays

LOCATION OF SWITCHES AND RELAYSBE2140
BE2139

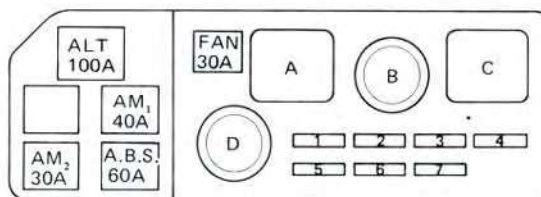
BODY ELECTRICAL SYSTEM — Location of Switches and Relays

BE-3

LOCATION OF SWITCHES AND RELAYS (Cont'd)



FUSE AND RELAY BLOCK NO. 2 (LOCATION: Engine Compartment)

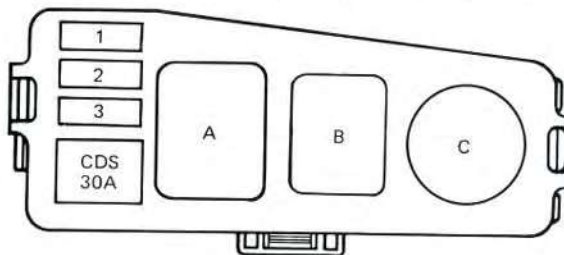
**Fuses**

- | | |
|----------------|-------|
| 1. HEAD (LH) | 15 A |
| 2. HAZ-HORN | 15 A |
| 3. EFI | 15 A |
| 4. CHARGE | 7.5 A |
| 5. HEAD (RH) | 15 A |
| 6. RTR | 30 A |
| 7. RADIO NO. 1 | 15 A |

Relays

- | | |
|----|-------------------------|
| A. | Engine Main Relay |
| B. | EFI Main Relay |
| C. | Headlight Control Relay |
| D. | Fan No. 1 Relay |

FUSE AND RELAY BLOCK NO. 5 (LOCATION: Engine Compartment)

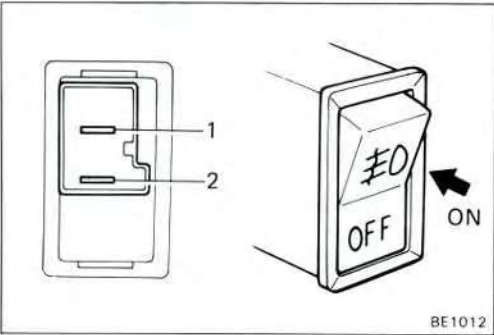
**Fuses**

- | | |
|--------|------|
| 1. FOG | 15 A |
|--------|------|

Relays

- | | |
|----|---------------------------|
| A. | A/C Fan No. 2 Relay |
| B. | A/C Magnetic Clutch Relay |
| C. | A/C Fan No. 3 Relay |

BE2125
BF1661
BE2121



LIGHTING

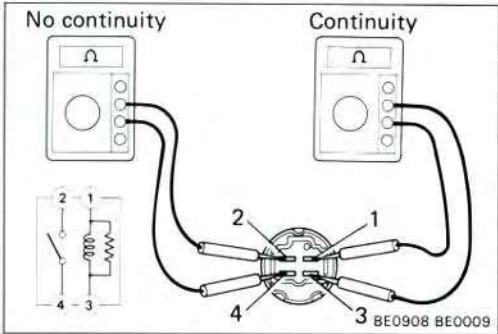
Fog Light Switch

INSPECT SWITCH CONTINUITY

Inspect the switch continuity between terminals.

Terminals	1	2
Position		
ON		
OFF		

If continuity is not as specified, replace the switch.

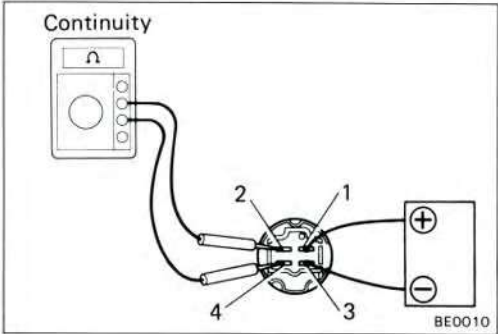


Fog Light Relay

1. INSPECT RELAY CONTINUITY

- (a) Check that there is continuity between terminals 1 and 3.
- (b) Check that there is no continuity between terminals 2 and 4.
- (c) Check that there is no continuity between terminals 3 and 4.

If continuity is not as specified, replace the relay.



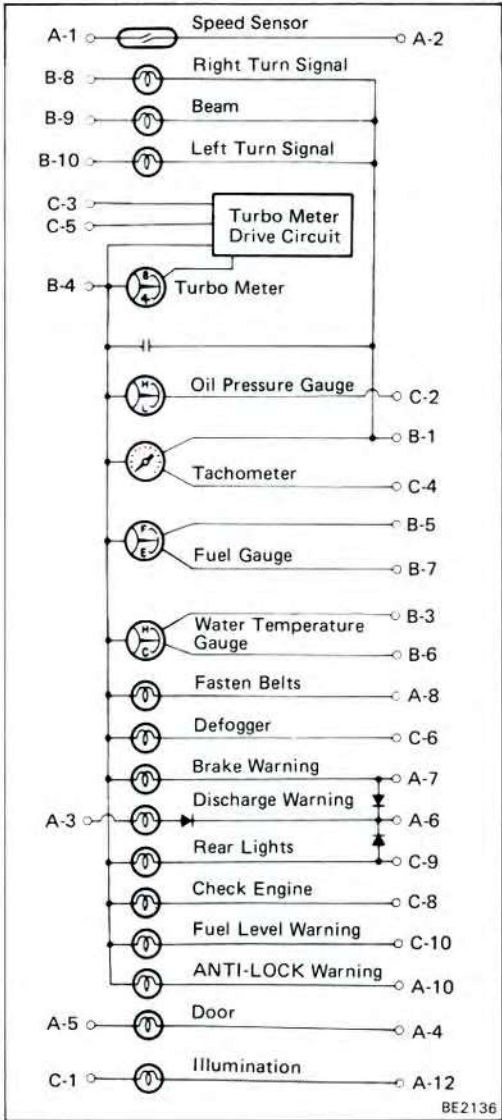
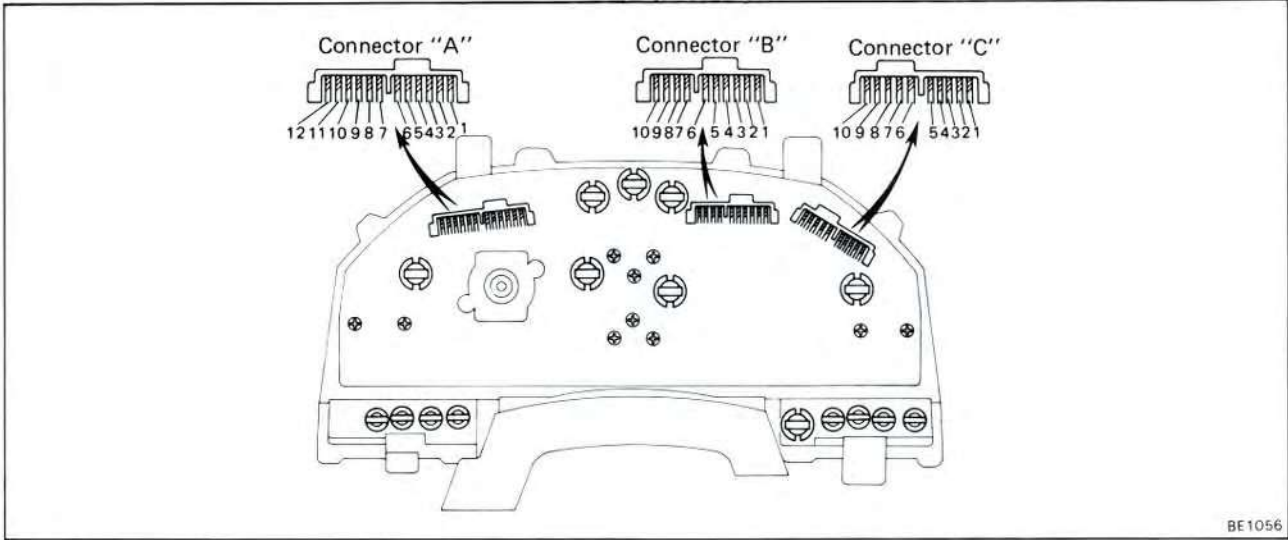
2. INSPECT RELAY OPERATION

- (a) Apply battery voltage to terminals 1 and 3.
- (b) Check that there is continuity between terminals 2 and 4.
- (c) Check that there is no continuity between terminals 3 and 4.

If operation is not as specified, replace the relay.

INSTRUMENTS, GAUGES AND WARNING LIGHTS

Combination Meter and Gauge

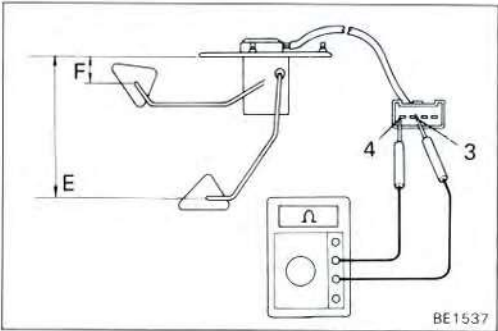
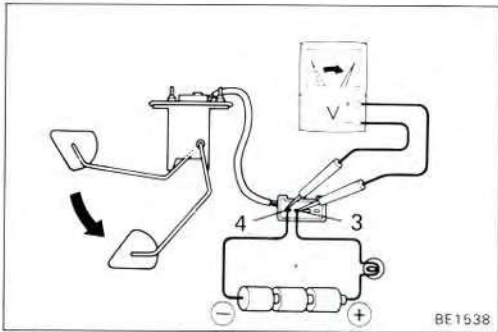


COMBINATION METER CIRCUIT

No.	Wiring connector side
A	1 TCCS ECU, Cruise Control ECU and ECT ECU 2 Ground 3 IGN Fuse 4 Door Courtesy Switch 5 DOME Fuse 6 CHARGE Fuse 7 Parking Brake Switch and Brake Fluid Level Warning Switch 8 Seat Belt Warning Relay 10 A.B.S. ECU 12 Light Control Rheostat
B	1 Ground 3 Water Temperature Gauge 4 GAUGE Fuse 5 Ground 6 Ground 7 Fuel Sender Gauge 8 Turn Signal Switch 9 Headlight Dimmer Switch 10 Turn Signal Switch
C	1 TAIL Fuse 2 Oil Pressure Sender Gauge 3 Turbo Pressure Sensor 4 IIA or Ignition Coil 5 Turbo Pressure Sensor (Ground) 6 Rear Window Defogger Switch 8 TCCS ECU 9 Light Failure Sensor 10 Fuel Sender Gauge

Speedometer

(See INTRODUCTION on page IN-13)



Fuel Gauge

INSPECTION OF FUEL GAUGE

1. INSPECT SENDER GAUGE OPERATION
- (a)

Connect a series of three 1.5 V dry cell batteries.
- (b)

Connect the positive (+) lead from the dry cell batteries to terminal 3 through a 3.4 W test bulb and the negative (−) lead to terminal 4.
- (c)

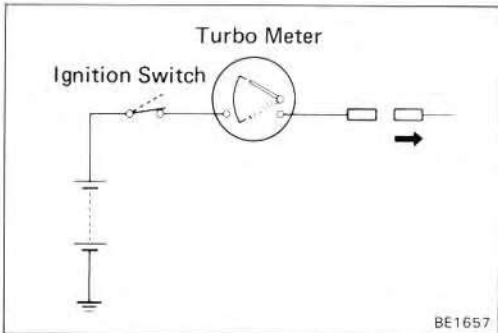
Check that the voltage rises between terminals 3 and 4 as the float is moved from the top to bottom position.
2. MEASURE SENDER GAUGE RESISTANCE
- (a)

Check that resistance changes as the float is moved from the top to bottom position.
- (b)

Measure the resistance between terminals 3 and 4 for each float position.

Float position	mm (in.)	Resistance (Ω)
F	Approx. 70 (2.7)	Approx. 3
E	Approx. 234 (9.21)	Approx. 110

If operation is not as specified, replace the sender gauge.

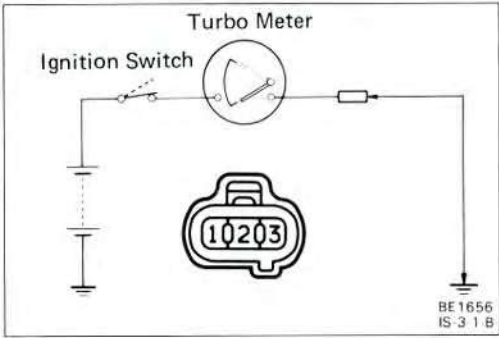


Turbo Meter

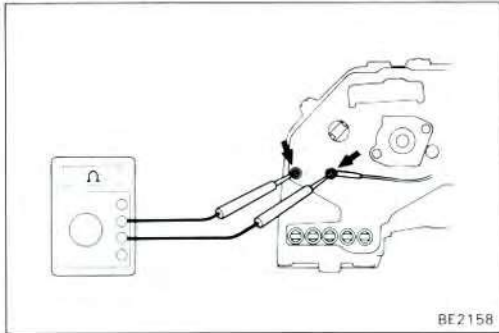
1. INSPECT METER OPERATION
- (a)

Disconnect the connector from the pressure sensor.
- (b)

Turn the ignition switch ON. Check that the meter needle moves to upper position.

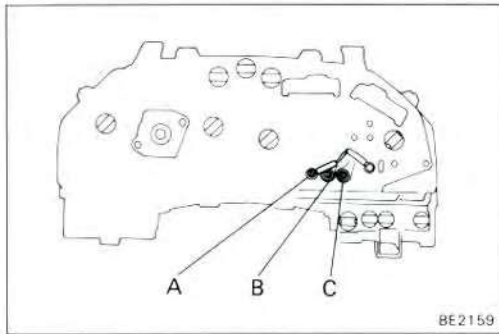


- (c) Ground the terminal 2 on the wire harness side.
Check that the meter needle moves to lower position.
If operation is not as specified, inspect the turbo meter circuit and resistance.



2. MEASURE METER RESISTANCE

- Measure the resistance between terminals.
Resistance: Approx. 72 Ω
If resistance value is not as specified, replace the turbo meter.

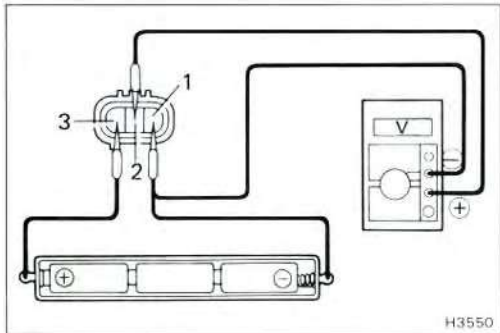


3. INSPECT METER DRIVE CIRCUIT

- (a) Remove the combination meter with connected the wire harness.
(b) Inspect the terminals of the meter drive circuit as show in the chart.

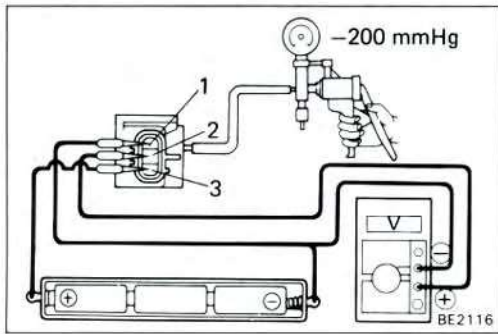
Check for	Tester connection	Condition	Specification value
Continuity	B — Ground	Always	Continuity
Voltage	A — Ground	Turn ignition switch to ACC or LOCK	No voltage
		Turn ignition switch ON	Battery voltage
	C — Ground	Turn ignition switch to ACC or LOCK	No voltage
		Turn ignition switch ON	Approx. 2.6 V
		Engine idling	Less than Approx. 2.0 V

If operation is as specifeied replace the drive circuit.

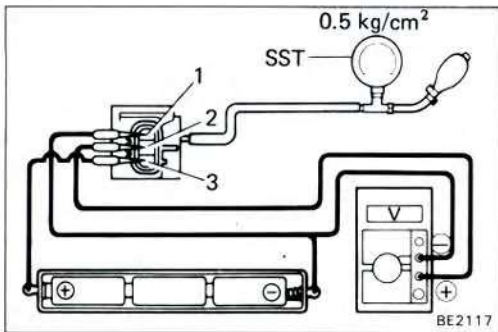


4. INSPECT PRESSURE SENSOR

- (a) Connect a series of three 1.5 V dry cell batteries.
(b) Connect the positive (+) lead from the dry cell batteries to terminal 3 and the negative (—) lead to terminal 1.
(c) Connect the positive (+) lead from the voltmeter to terminal 2 and the negative (—) lead to terminal 1.
(d) Check that the voltage between terminals 2 and 1.
Voltage: Approx. 2.6 V

BE-8 BODY ELECTRICAL SYSTEM — Instruments, Gauges and Warning Lights

- (e) Apply 200 mmHg (7.87 in.Hg. 26.7 kPa) of vacuum.
Check that the voltage drops below approximately 2.6 V.



- (f) Using SST, apply 0.5 kg/cm² (7.1 psi, 49 kPa) of pressure.
Check that the voltage rises approximately 2.6 V.
SST 09992-00241
If operations are not as specified, replace the sensor.

BODY ELECTRICAL SYSTEM — Audio System

BE-9

AUDIO SYSTEM

CD Player

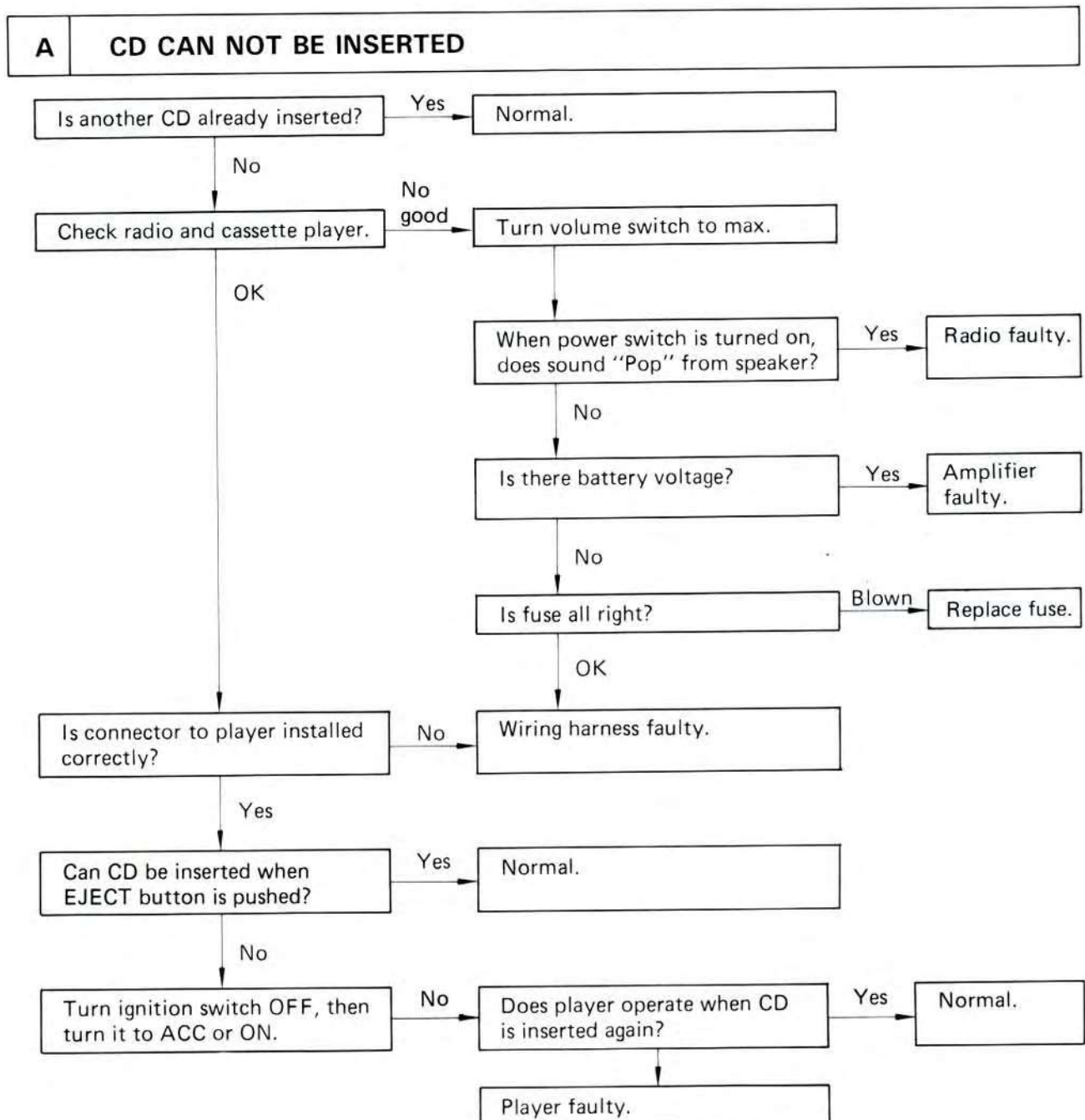
Troubleshooting

Check that the operation of other audio systems (Radio, Cassette etc.) are normal.

NOTE: Never attempt to disassemble or oil any part of the player unit. Do not insert any object other than a disc into the slot. Remember there are no user-serviceable parts inside.

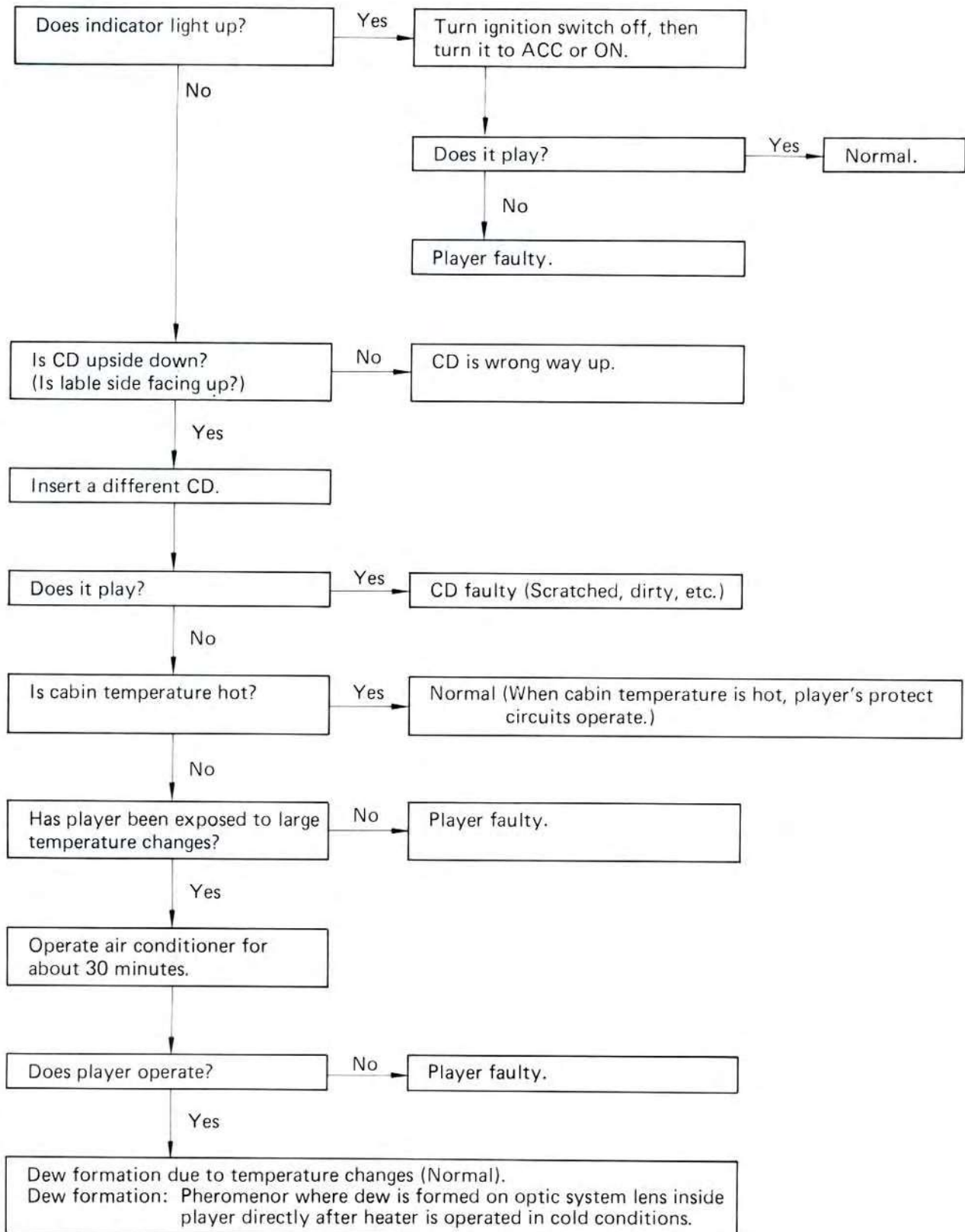
CAUTION: Compact Disc players use invisible laser beam which could cause hazardous radiation exposure if directed. Be sure to operate the player correctly as instructed.

Problem	Section
CD can not be inserted	A
Does not play	B
Sound jumps	C
Bad sound Quality	D
CD will not eject	E



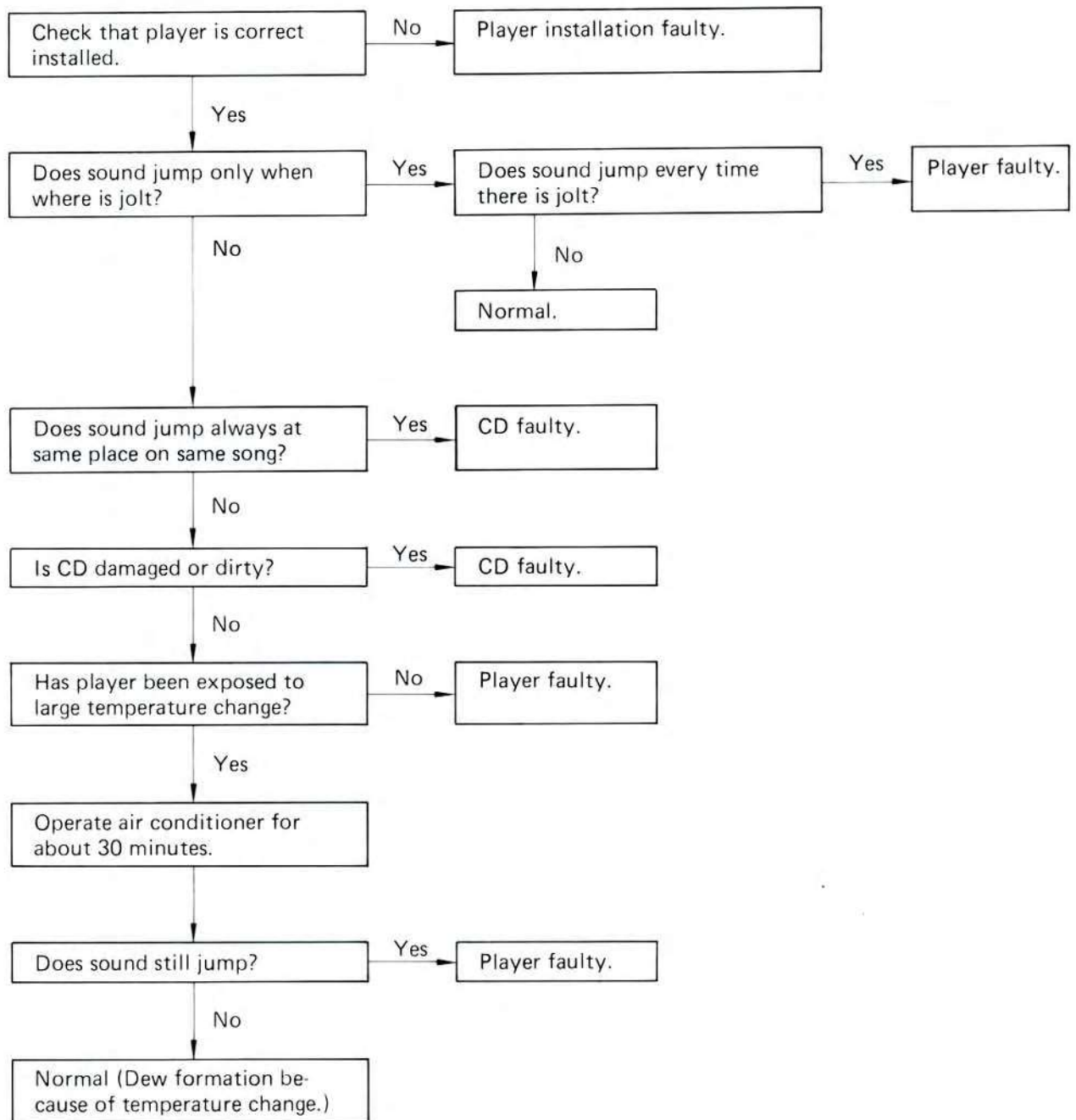
BE-10

BODY ELECTRICAL SYSTEM — Audio System

B DOES NOT PLAY

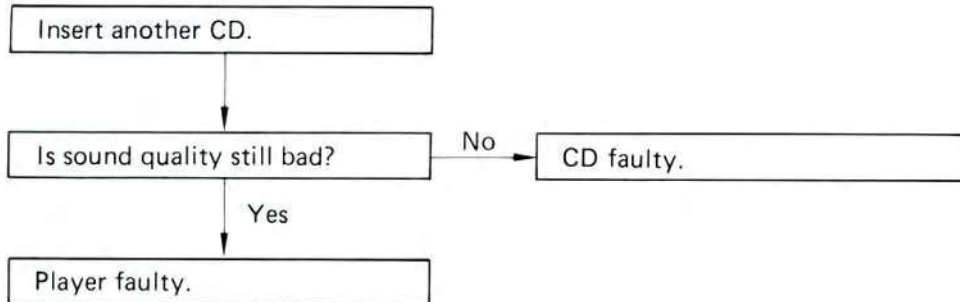
BODY ELECTRICAL SYSTEM — Audio System

BE-11

C SOUND JUMPS

BE-12

BODY ELECTRICAL SYSTEM — Audio System

D BAD SOUND QUALITY**E CD WILL NOT EJECT**