

DTC

B1499/99

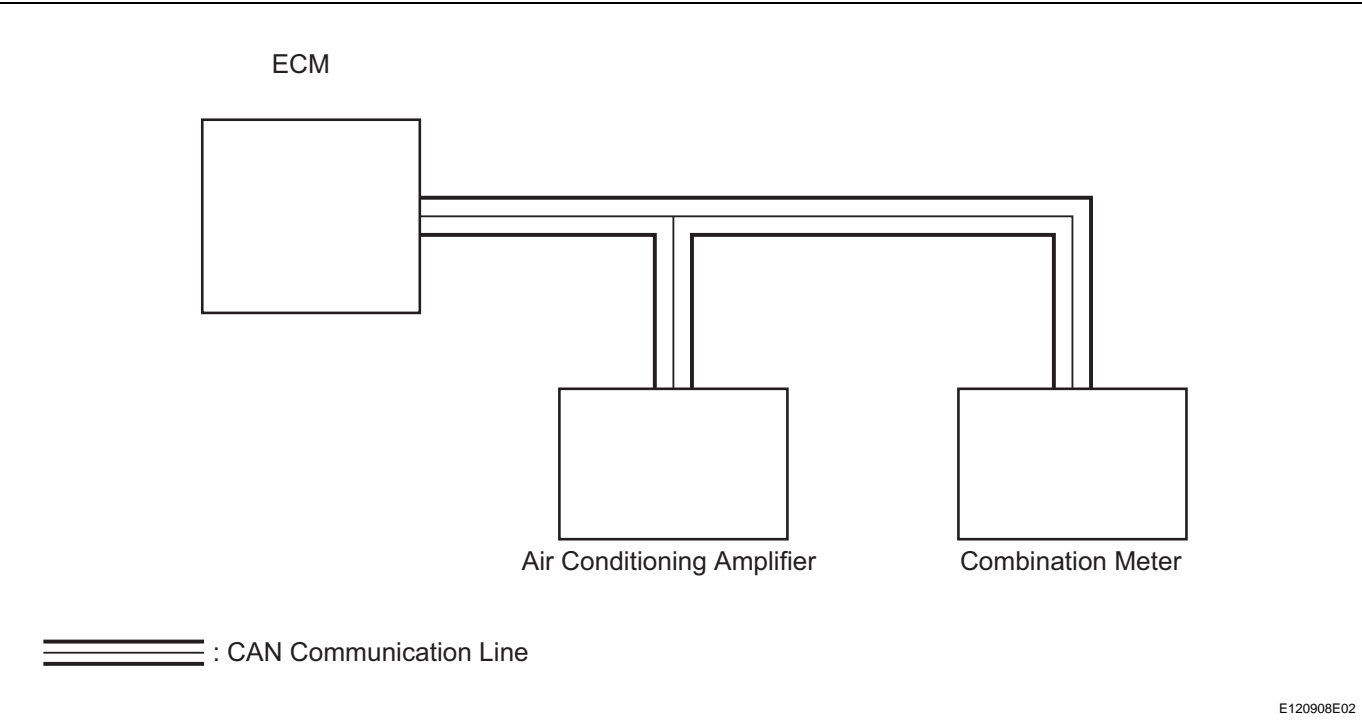
Multiplex Communication Circuit

DESCRIPTION

The air conditioning amplifier communicates data with the ECM and combination meter through the CAN communication system.

| DTC No. | DTC Detection Condition | Trouble Area |
|----------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| B1499/99 | Open in CAN communication line | <ul style="list-style-type: none">• Air conditioning amplifier• ECM• Combination meter• CAN communication line |

WIRING DIAGRAM



INSPECTION PROCEDURE

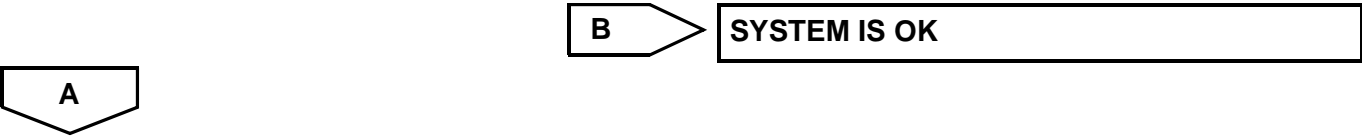
1

CHECK DTC

- (a) Clear the DTC (see page AC-31).
- (b) Read the DTC (see page AC-31).

Result

| Result | Proceed to |
|------------------------------|-------------------|
| DTC (B1499/99) is output | A (see page CA-1) |
| DTC (B1499/99) is not output | B |



GO TO CAN COMMUNICATION SYSTEM

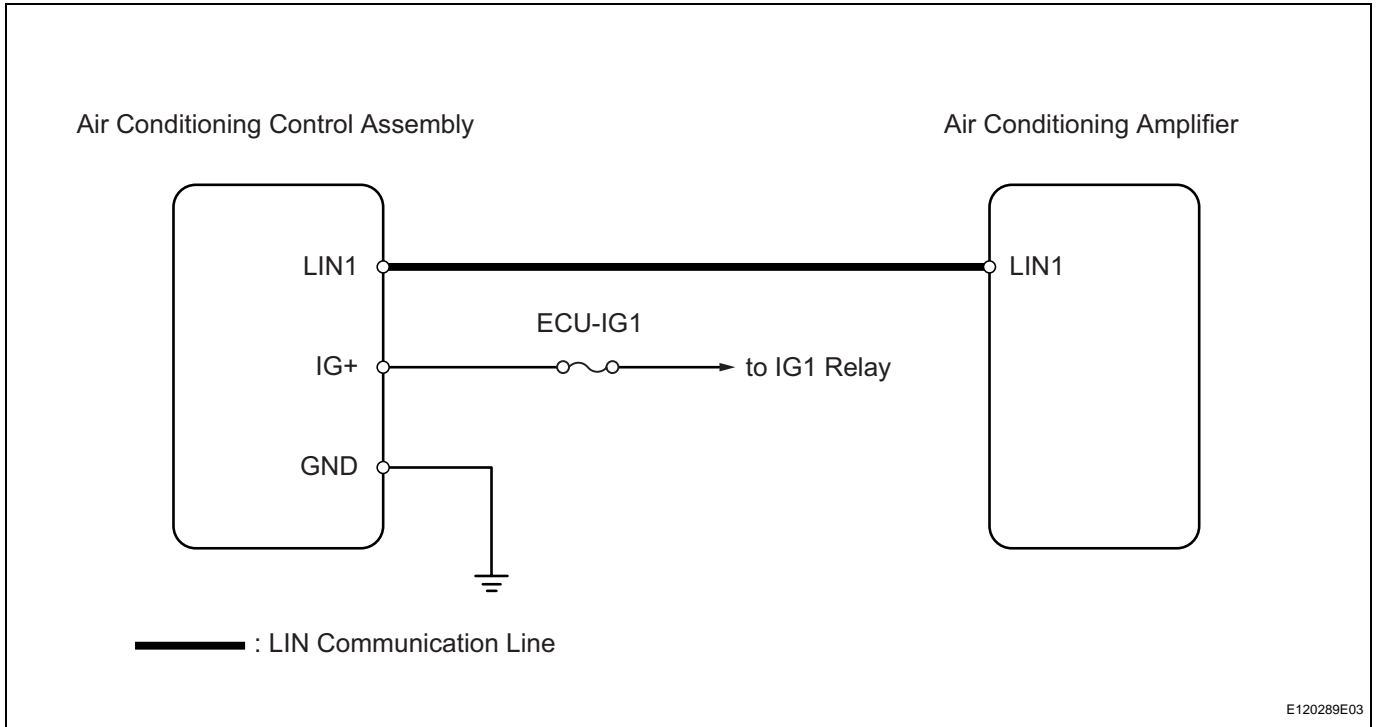
Air Conditioning Control Panel does not Operate

DESCRIPTION

This circuit consists of the air conditioning control and the air conditioning amplifier. When the air conditioning control is operated, signals are transmitted to the air conditioning amplifier through the LIN communication system.

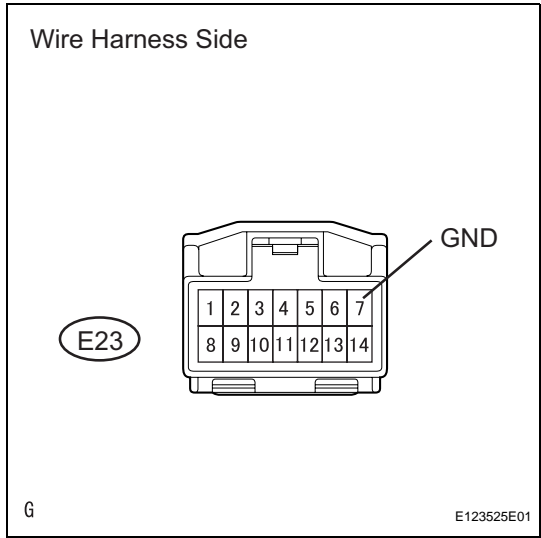
If the LIN communication system malfunctions, the air conditioning amplifier does not operate even if the air conditioning control is operated.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK WIRE HARNESS (AIR CONDITIONING CONTROL ASSEMBLY - BODY GROUND)



- (a) Disconnect the air conditioning control assembly connector.
- (b) Measure the resistance of the wire harness side connector.

Standard resistance

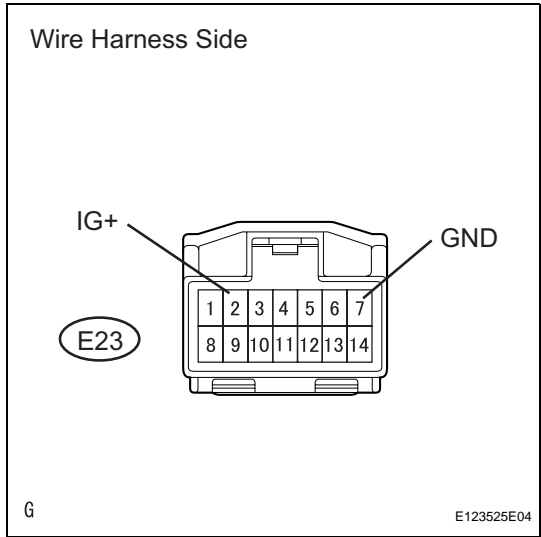
| Tester Connection | Specified Condition |
|---------------------------|---------------------|
| E23-7 (GND) - Body ground | Below 1 Ω |

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

2 CHECK WIRE HARNESS (AIR CONDITIONING CONTROL ASSEMBLY - BATTERY)



- (a) Disconnect the E23 air conditioning control assembly connector.
- (b) Measure the voltage of the wire harness side connector.

Standard voltage

| Tester Connection | Condition | Specified Condition |
|---------------------------|--------------------|---------------------|
| E23-7 (GND) - E23-2 (IG+) | Ignition switch ON | 10 to 14 V |

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REPAIR OR REPLACE HARNESS AND CONNECTOR

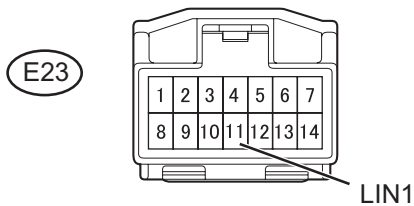
OK

3

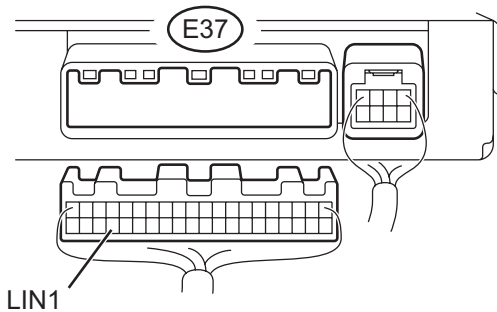
CHECK WIRE HARNESS (AIR CONDITIONING AMPLIFIER - AIR CONDITIONING CONTROL)

Wire Harness Side

Air Conditioning Control Assembly



Air Conditioning Amplifier



E123519E01

- (a) Disconnect the E23 control connector.
- (b) Disconnect the E37 amplifier connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

| Tester Connection | Specified Condition |
|-------------------------------|---------------------|
| E37-37 (LIN1) - E23-11 (LIN1) | Below 1 Ω |

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

4

REPLACE AIR CONDITIONING AMPLIFIER

- (a) Replace the air conditioning control with a new or properly functioning one.
- (b) Operate the air conditioning control to check that it functions properly.

Result

| Result | Proceed to |
|---------------------------------------------|------------|
| Air conditioning control malfunctions | A |
| Air conditioning control functions properly | B |

B

END (AIR CONDITIONING CONTROL ASSEMBLY IS FAULTY)

A

REPLACE AIR CONDITIONING AMPLIFIER

AC