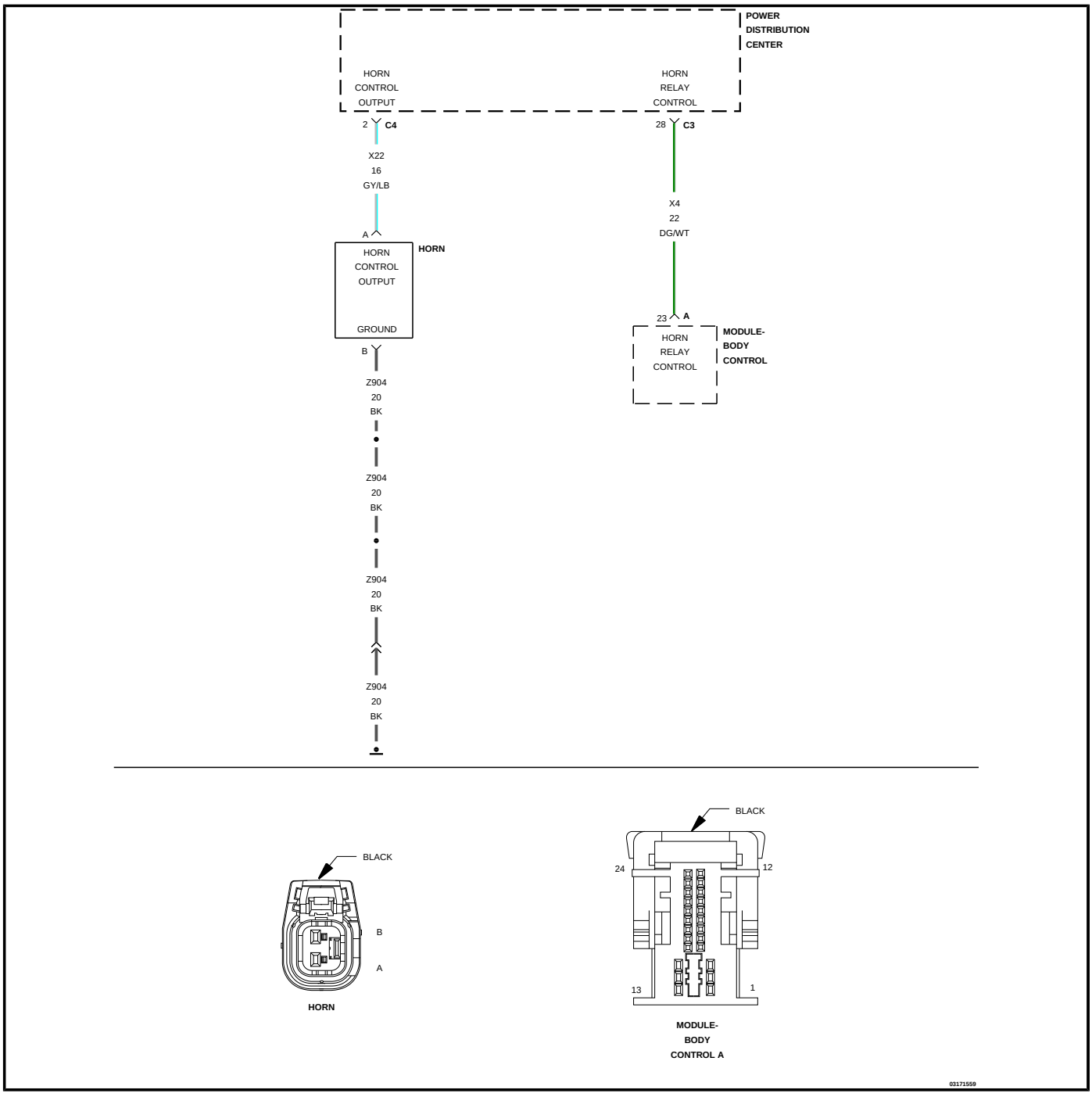
B2335-15-HORN CONTROL - CIRCUIT SHORT TO BATTERY OR OPEN



For a complete wiring diagram, **refer to the Wiring Information**.

Theory of Operation

The Body Control Module (BCM) receives the network communication message from the Steering Control Module indicating horn operation is requested. The BCM provides a voltage output through the horn relay control circuit, which connects to the coil side of the Horn Relay.

- **When Monitored:**

  With the ignition on.

  With the Horn off.

- **Set Condition:**

  When the Body Control Module (BCM) detects a high condition on the (X4) Horn Relay Control circuit.

Possible Causes
(X4) HORN RELAY CONTROL CIRCUIT OPEN
(X4) HORN RELAY CONTROL CIRCUIT SHORTED TO VOLTAGE
HORN RELAY (INTEGRAL TO POWER DISTRIBUTION CENTER)
BODY CONTROL MODULE (BCM)

1. INTERMITTENT CONDITION

1. Turn the ignition on.
2. With the scan tool, clear all DTCs.
3. Turn the ignition off.
4. Turn the ignition on.
5. With the scan tool, read DTCs.

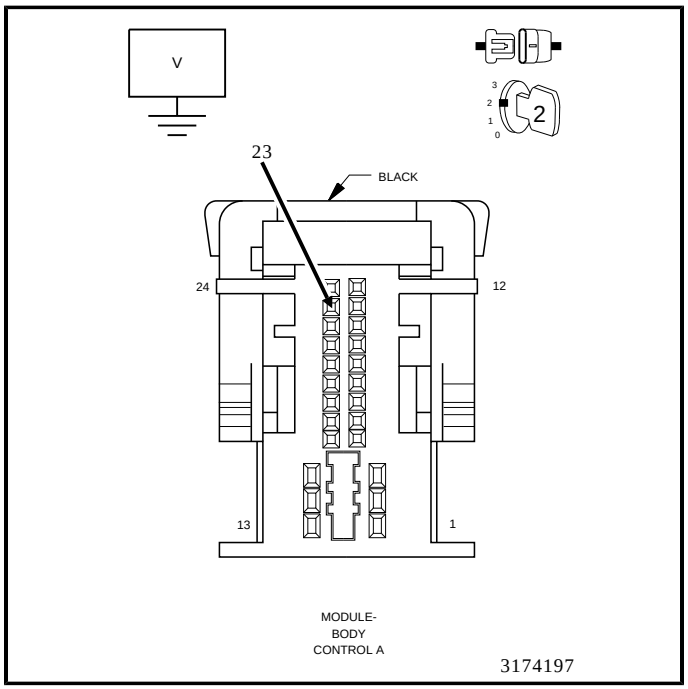
Does the scan tool display DTC: B2335-15-HORN CONTROL - CIRCUIT SHORT TO BATTERY OR OPEN?

Yes
- Go To 2

No
- Test complete, the condition or conditions that originally set this DTC are not present at this time. Using the wiring diagrams as a guide, check all related splices and connectors for signs of water intrusion, corrosion, pushed out or bent terminals, and correct pin tension.
- Perform the BODY VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Body Control (BCM) - Standard Procedure).

2. CHECK THE (X4) HORN RELAY CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

1. Turn the ignition off.
2. Disconnect the PDC C3 harness connector.
3. Disconnect the BCM A harness connector.
4. Turn the ignition on.
5. Measure the voltage between ground and the (X4) Horn Relay Control circuit.



Is there any voltage present?

Yes
- Repair the short to voltage in the (X4) Horn Relay Control circuit.
- Perform the BODY VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/ MODULE, Body Control (BCM) - Standard Procedure).

No
- Go To 3

3. CHECK THE (X4) HORN RELAY CONTROL CIRCUIT FOR AN OPEN

1. Measure the resistance of the (X4) Horn Relay Control circuit between the PDC and the BCM A harness connector.

Is the resistance below 5.0 Ohms?

Yes
- Go To 4

No
- Repair the open in the (X4) Horn Relay Control circuit.
- Perform the BODY VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Body Control (BCM) - Standard Procedure).

4. CHECK THE BCM FOR CORRECT OPERATION

1. Reconnect the BCM A harness connector.
2. Turn the ignition on.
3. Apply the Horn switch.
4. Using a 12-volt test light connected to ground, check the (X4) Horn Relay Control circuit at the PDC C3 harness connector.

Does the test light illuminate?

Yes
- Replace the PDC in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Body Control (BCM) - Standard Procedure).

No
- Replace the Body Control Module (BCM) in accordance with the Service Information. (Refer to 08 - Electrical/8E - Electronic Control Modules/MODULE, Body Control - Removal).

- Perform the BODY VERIFICATION TEST. (Refer to 28 - DTC-Based Diagnostics/MODULE, Body Control (BCM) - Standard Procedure).