

2009 ACCESSORIES AND EQUIPMENT

Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

P128E-TCM POWER CONTROL CIRCUIT 2 OVERCURRENT - 41TE - NGC

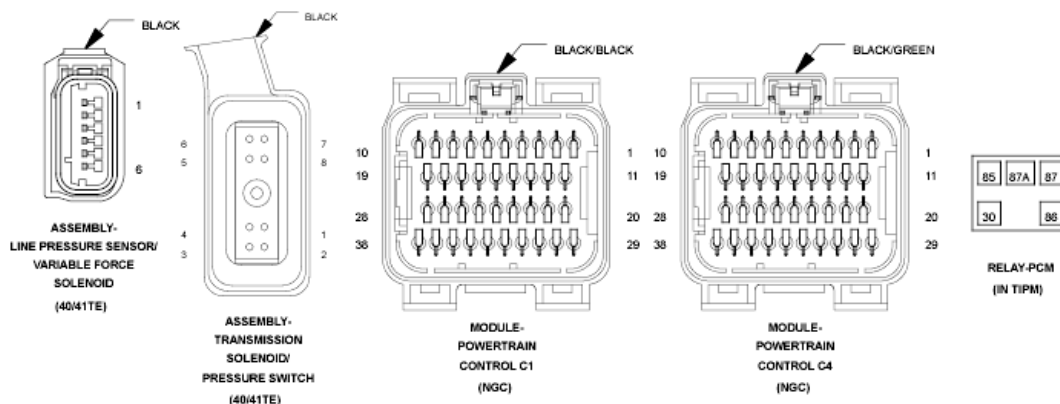
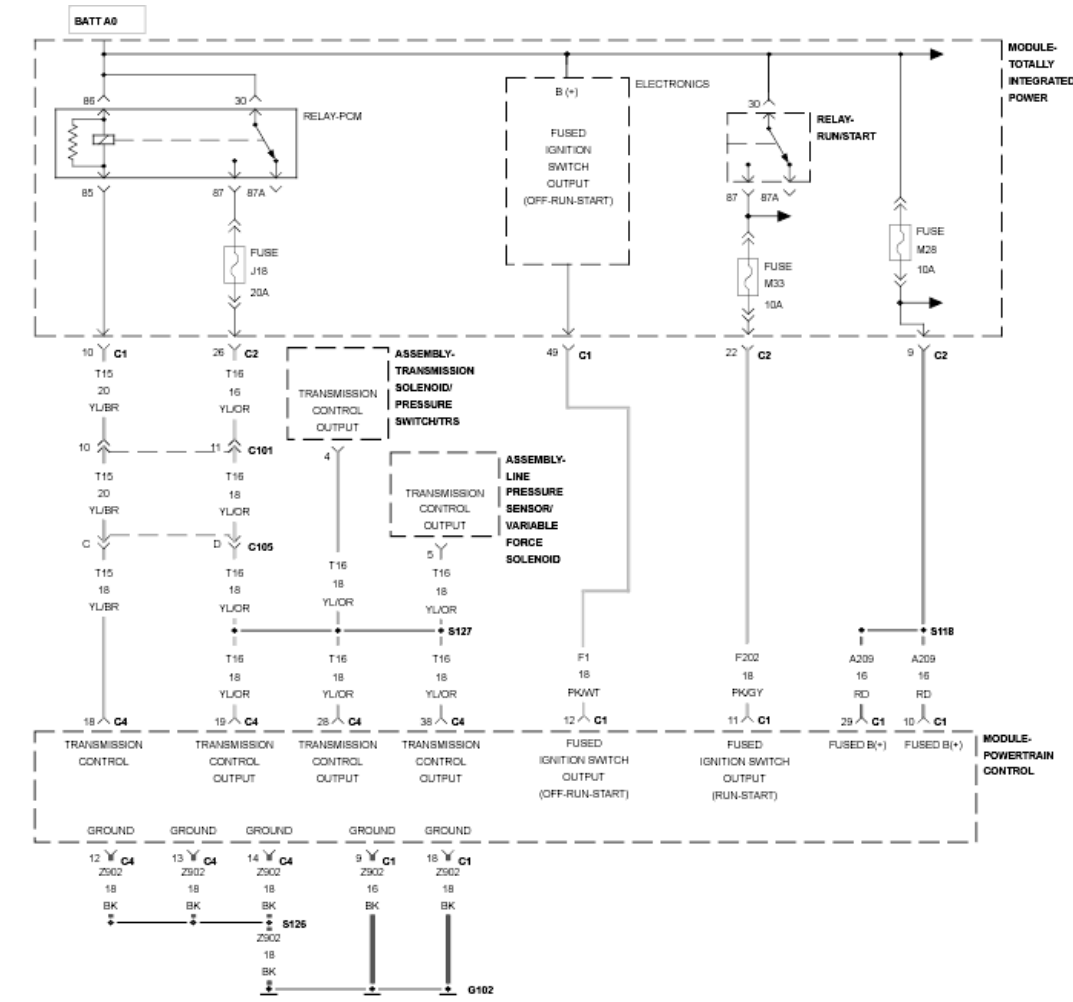


Fig. 1: Transmission Control Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on and battery voltage greater than 10.0 volts.

- **Set Condition:**

The Totally Integrated Power Module (TIPM) has detected an overcurrent condition in the Transmission Control Output circuit.

Possible Causes
(T16) TRANSMISSION CONTROL OUTPUT CIRCUIT SHORT TO GROUND SOLENOID/PRESSURE SWITCH ASSEMBLY VARIABLE LINE PRESSURE ASSEMBLY POWERTRAIN CONTROL MODULE (PCM) TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST

1. CHECK IF THE DTC IS ACTIVE

1. Ignition on, engine not running.
2. With a scan tool, read DTCs.

Is the DTC active?

Yes

- Go to Step 2.

No

- Go to Step 6.

2. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT FOR A SHORT TO GROUND

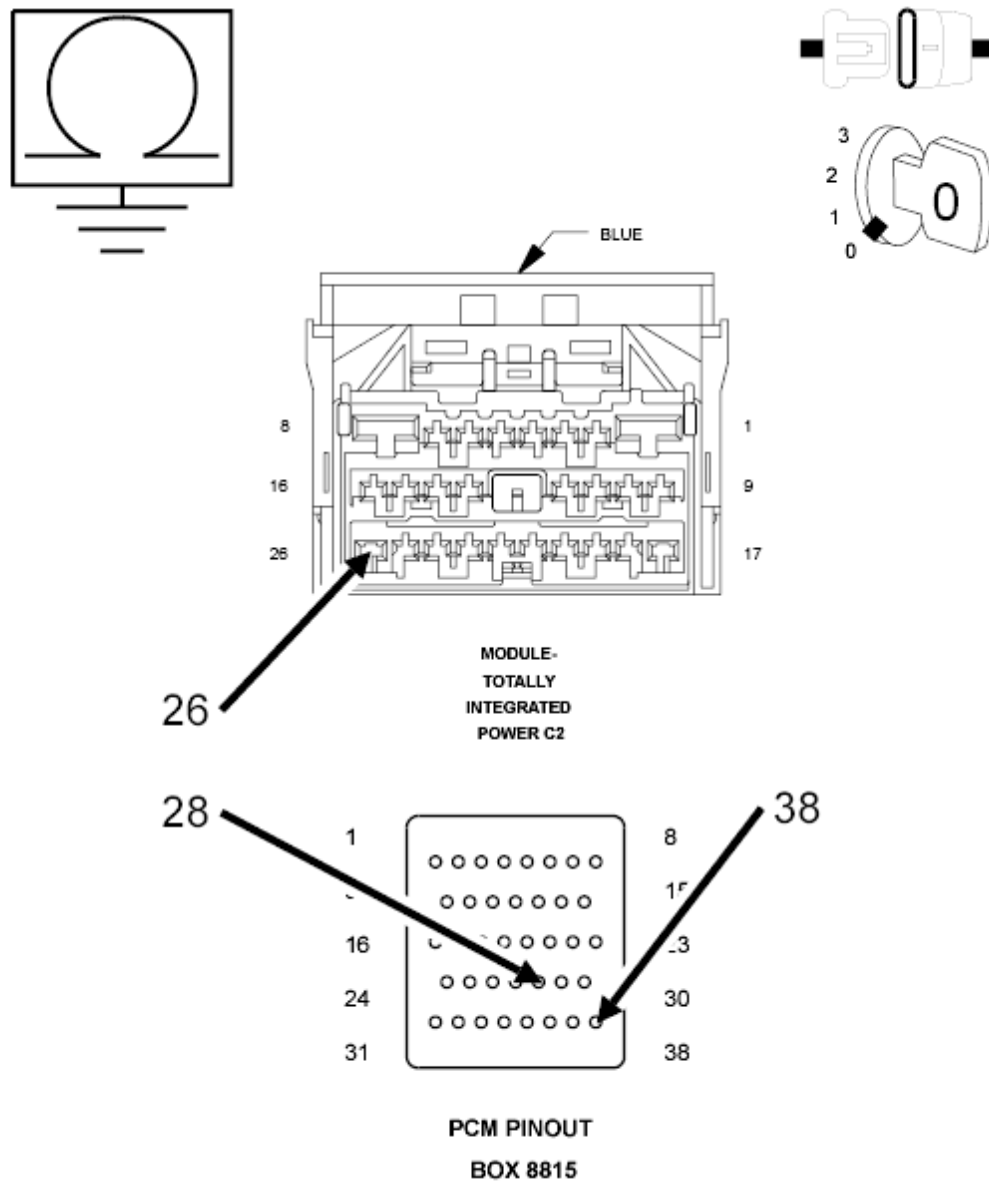


Fig. 2: Checking Transmission Control Output Circuit For Short To Ground
Courtesy of CHRYSLER LLC

1. Turn the ignition off to the lock position.
2. Remove the Transmission Control Relay from the TIPM.

NOTE: Due to different power control configurations, the Transmission Control Relay may be referred to as a PCM relay.

3. Disconnect the Transmission Solenoid/Pressure Switch Assembly harness connector.
4. Disconnect the Line Pressure Sensor/Variable Force Solenoid Assembly harness connector.

5. Disconnect the PCM C4 harness connector and connect the PCM Pinout Box 8815.

CAUTION: Do not probe the PCM harness connectors. Probing the PCM harness connectors will damage the PCM terminals resulting in poor terminal to pin connection. Install the PCM Pinout Box 8815 to perform diagnosis.

6. Measure the resistance between ground and the (T16) Transmission Control Output circuit.

Is the resistance below 100k Ohms?

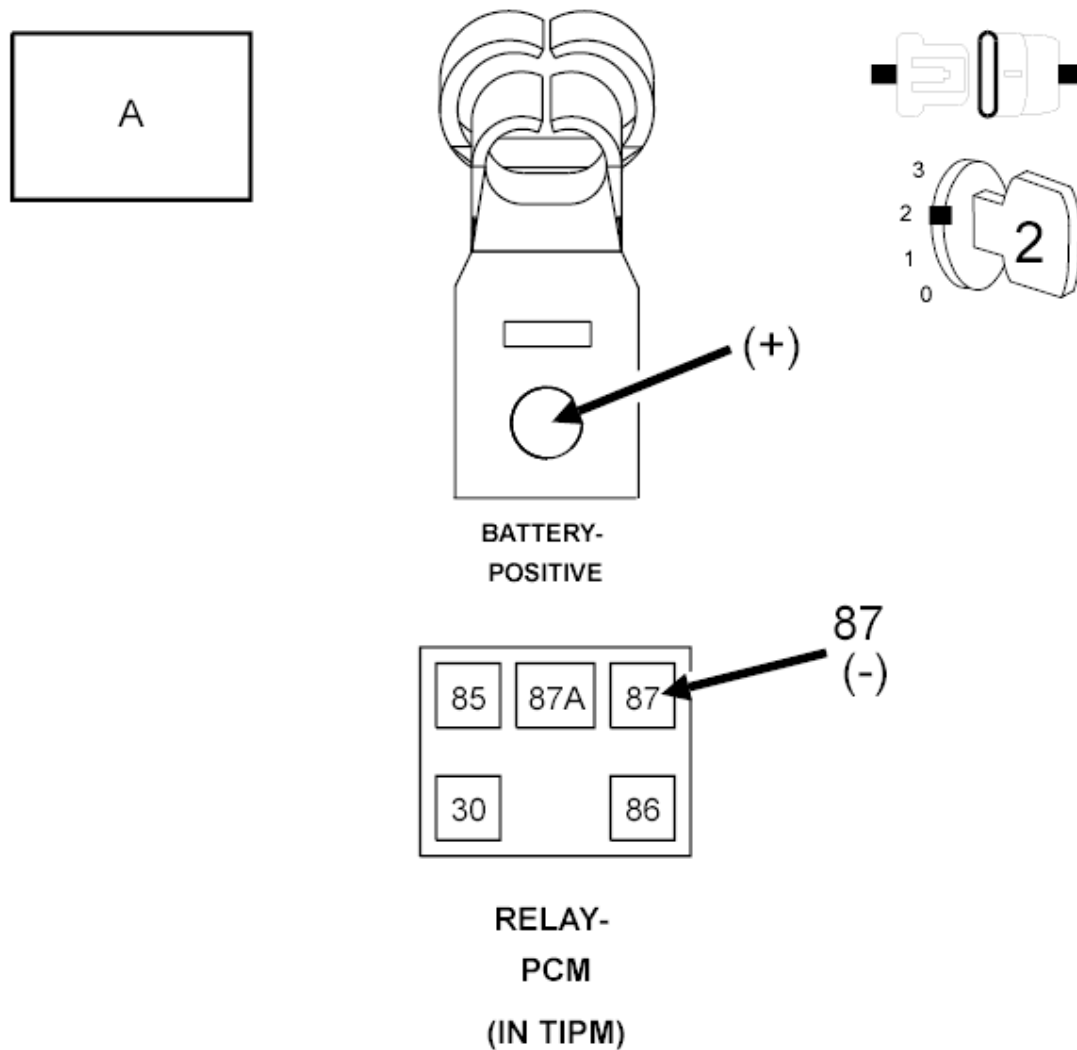
Yes

- Repair the (T16) Transmission Control Output circuit for a short to ground.
- Perform the 40/41TE VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure** .

No

- Go to Step 3.

3. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT



78283

Fig. 3: Checking Transmission Control Output Circuit
Courtesy of CHRYSLER LLC

1. Reconnect the PCM C4 harness connector.
2. Reconnect the Transmission Solenoid/Pressure Switch Assembly harness connector.
3. Reconnect the Line Pressure Sensor/Variable Force Solenoid Assembly harness connector.
4. Connect the positive probe of an ammeter to battery positive and connect the negative probe to the (T16) Transmission Control Output circuit in the Relay connector in the TIPM.
5. Read the amperage on the ammeter.

Does the amperage read below 1.0 amp?

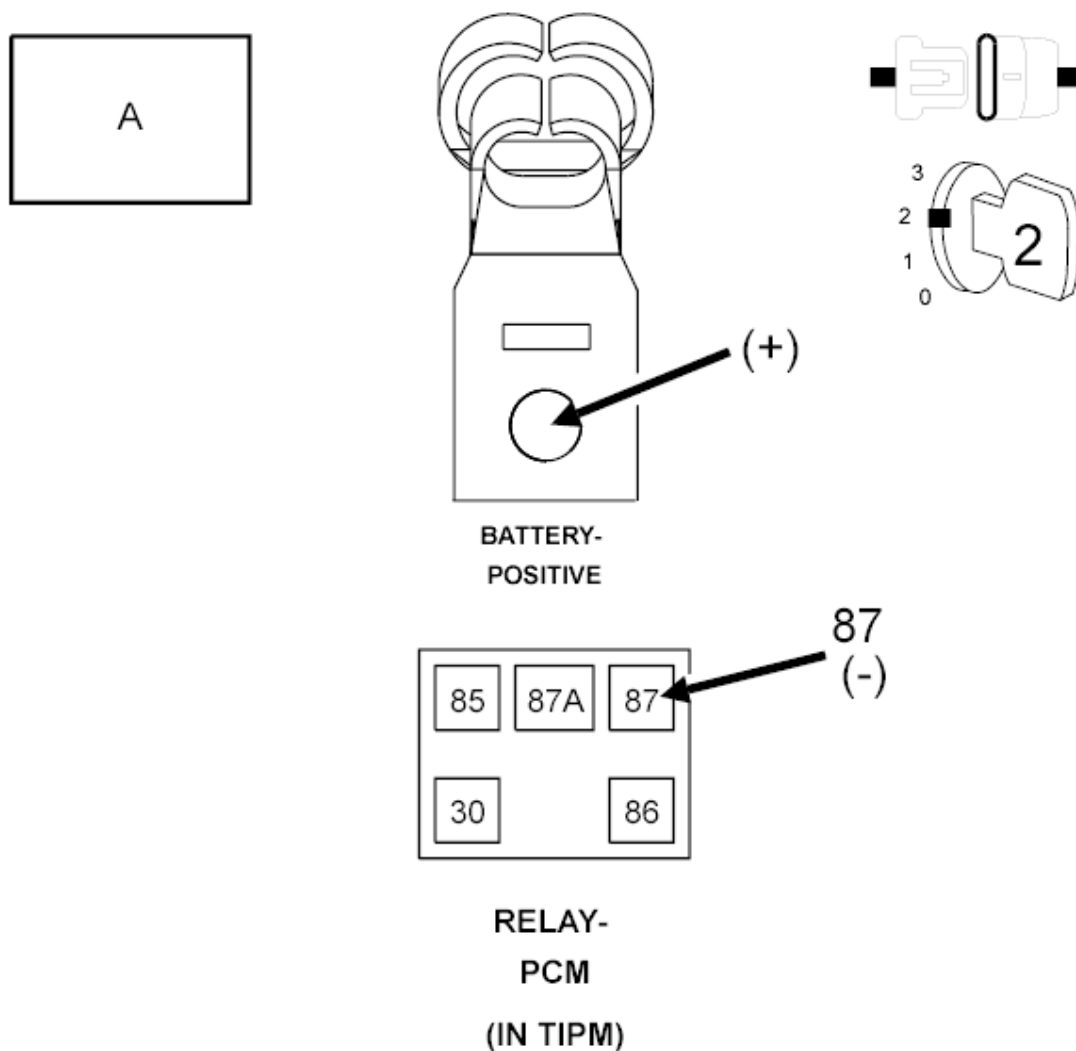
Yes

- Go to Step 5.

No

- Go to Step 4.

4. CHECK THE POWERTRAIN CONTROL MODULE



78283

Fig. 4: Checking Powertrain Control Module
Courtesy of CHRYSLER LLC

1. Disconnect the ammeter from battery positive.
2. Disconnect the PCM C4 harness connector and connect Miller tool #8815.
3. Reconnect the positive probe of an ammeter to battery positive.

4. Read the amperage on the ammeter.

Does the amperage read below 2.0 amps?

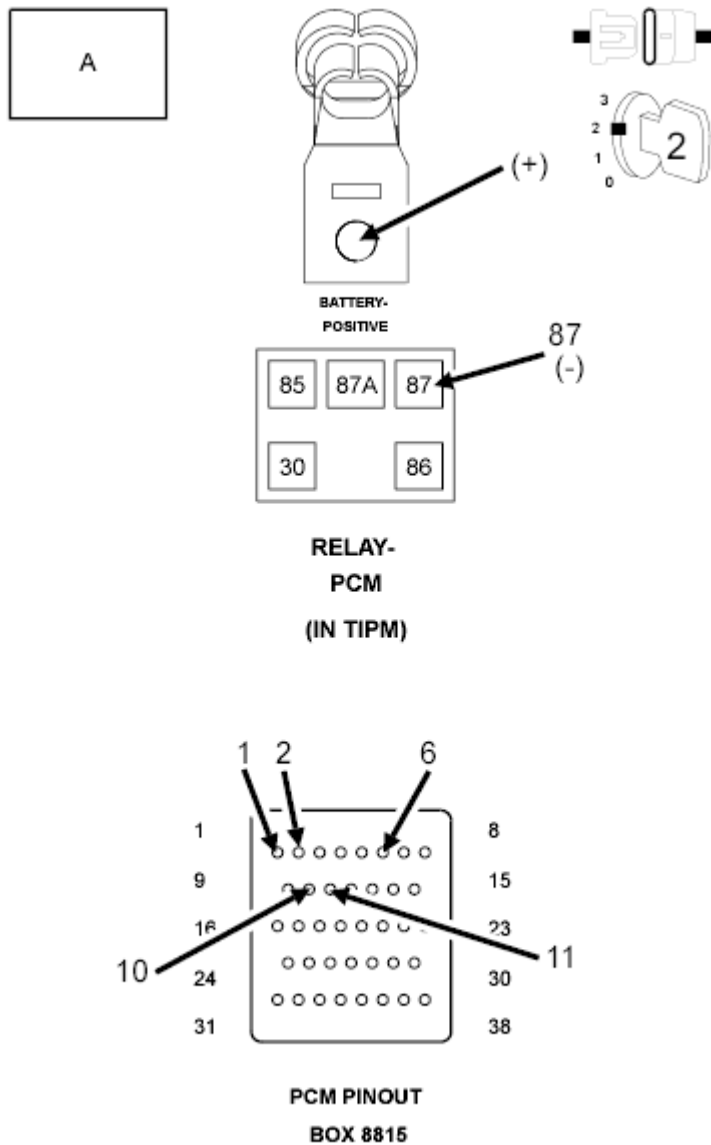
Yes

- Using the schematics as a guide, check the Powertrain Control Module (PCM) terminals for corrosion, damage, or terminal push out. Pay particular attention to all power and ground circuits. If no problems are found, replace and program the PCM in accordance with the Service Information. With the scan tool, perform Quick Learn.
- Perform the 40/41TE VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure** .

No

- Go to Step 5.

5. CHECK THE TRANSMISSION SOLENOIDS



78285

Fig. 5: Checking Transmission Solenoids

Courtesy of CHRYSLER LLC

1. Disconnect the ammeter from battery positive.
2. Disconnect the PCM C4 harness connector and connect Miller tool #8815.
3. Reconnect the positive probe of the ammeter to battery positive.
4. Monitor the amperage on the ammeter in the following step.
5. Using a jumper wire, momentarily jump each solenoid control circuit to ground one at a time in the appropriate terminals of Miller tool #8815.

TYPE OF SOLENOID	AMPERAGE READING
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VARIABLE FORCE SOLENOID (VFS)	2000 milliamps (mA) $\pm$ 10%
CLUTCH SOLENOID	6.0 to 6.5 amps

6. INTERMITTENT WIRING AND CONNECTORS

1. The conditions necessary to set the DTC are not present at this time.
2. Using **Fig. 1** as a guide, inspect the wiring and connectors specific to this circuit.
3. Wiggle the wires while checking for shorted and open circuits.
4. With the scan tool, check the Event Data to help identify the conditions in which the DTC was set.

Were there any problems found?

Yes

- Repair as necessary.
- Perform the 40/41TE VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure** .

No

- Test Complete.

P128B-TCM POWER CONTROL CIRCUIT 2 LOW - NGC

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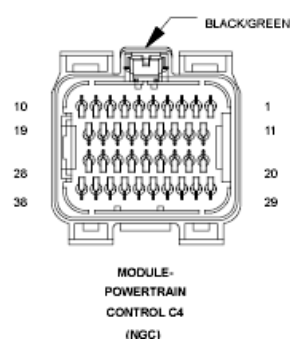
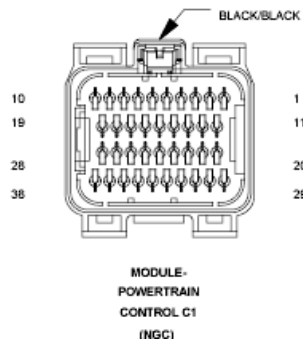
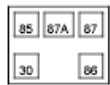
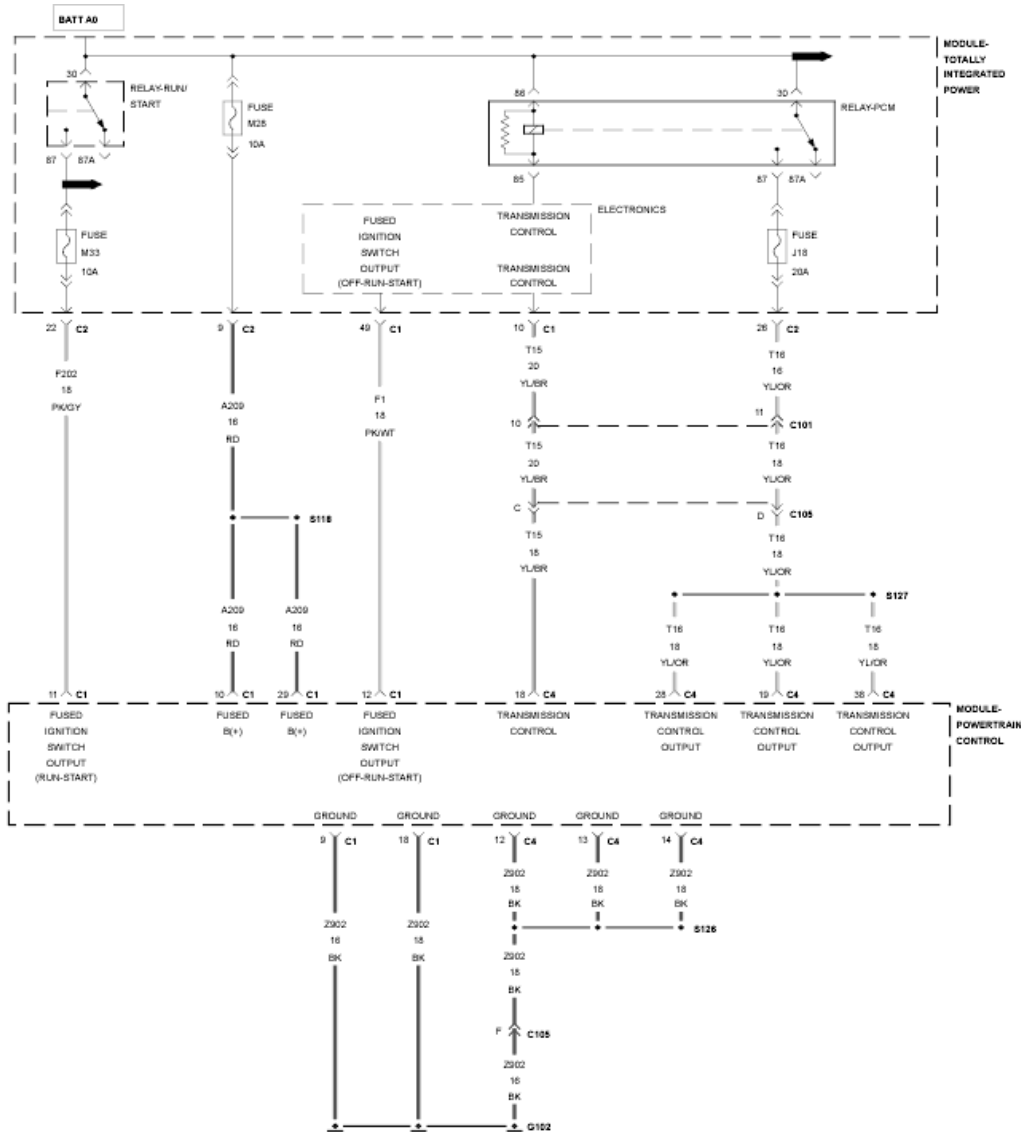


Fig. 6: TCM Power Control - Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

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2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

- **When Monitored:**

With the ignition on. Battery voltage greater than 10 volts.

- **Set Condition:**

The Totally Integrated Power Module (TIPM) has detected a short or open condition in the Transmission Control Output circuit.

Possible Causes
(T16) TRANSMISSION CONTROL OUTPUT CIRCUIT SHORTED TO GROUND TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST

1. CHECK IF THE DTC IS ACTIVE

1. Ignition on, engine not running.
2. With the scan tool, read DTCs.

Is the status Active for this DTC?

Yes

- Go to Step 2.

No

- Go to Step 4.

2. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT FOR A SHORT TO GROUND

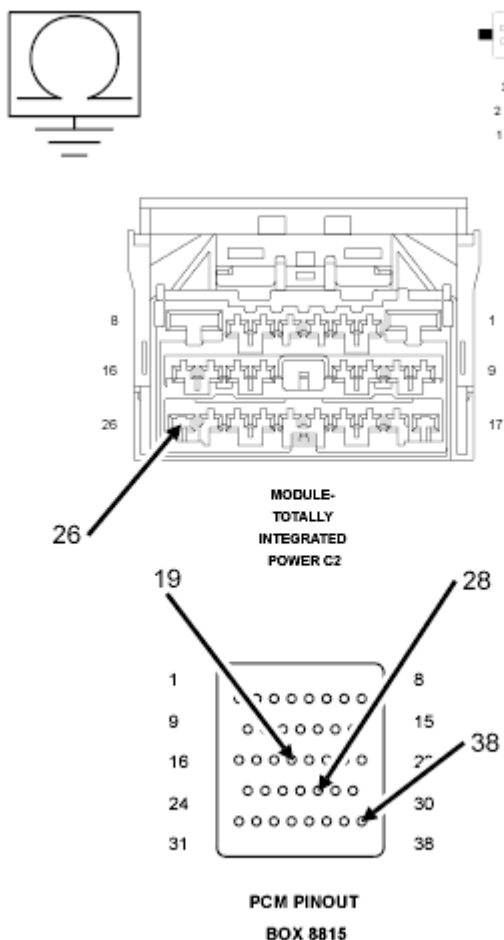


Fig. 7: Measuring Resistance Between Ground & Transmission Control Output Circuit
Courtesy of CHRYSLER LLC

1. Turn the ignition off to the lock position.
2. Disconnect the TIPM C2 harness connector.
3. Disconnect the PCM C4 harness connector and install Miller tool #8815.

CAUTION: Do not probe the PCM harness connectors. Probing the PCM harness connectors will damage the PCM terminals resulting in poor terminal to pin connection. Install the PCM Pinout Box 8815 to perform diagnosis.

4. Measure the resistance between ground and the (T16) Transmission Control Output.

Is the resistance below 5.0 Ohms?

Yes

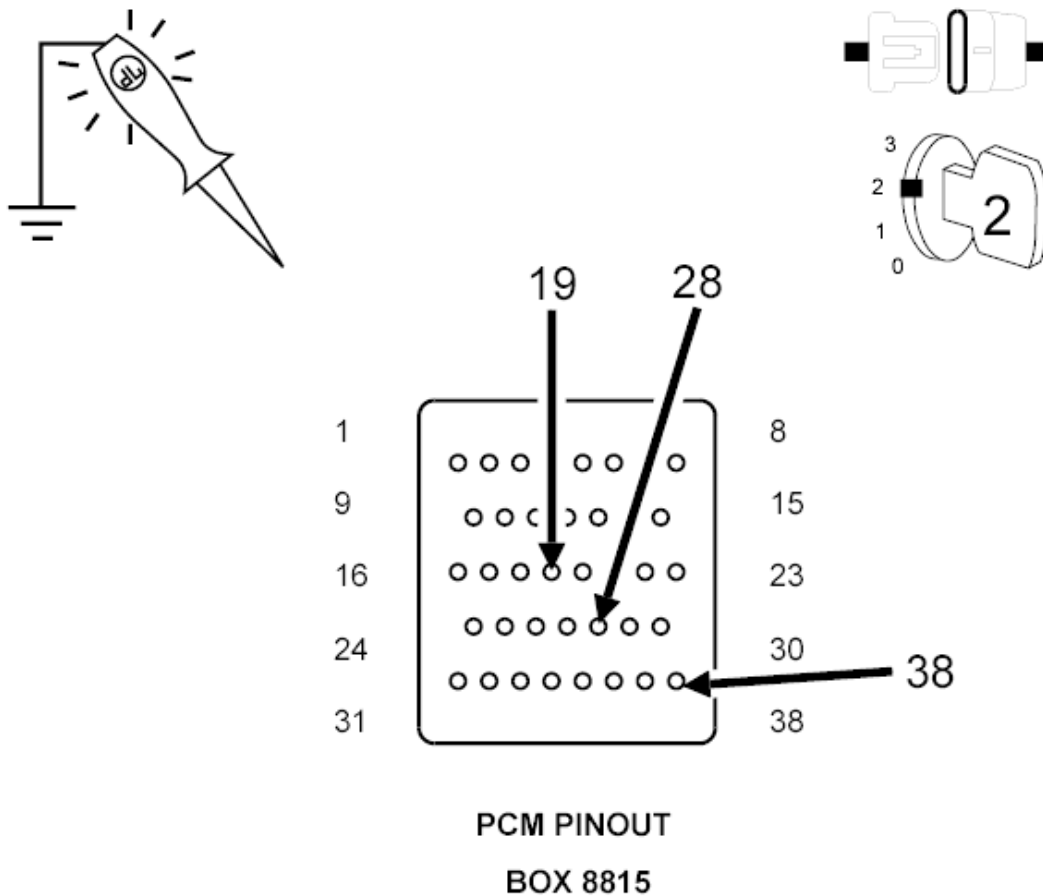
Repair the (T16) Transmission Control Output for a short to ground.

- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST**.

No

- Go to Step 3.

3. **CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT FOR AN OPEN**



77245

Fig. 8: Checking Transmission Control Output Circuit For An Open
Courtesy of CHRYSLER LLC

1. Reconnect the TIPM C2 harness connector.
2. Disconnect the Transmission Solenoid harness connector.
3. Ignition on, engine not running.

4. Using the scan tool under the TIPM Actuators, actuate the Transmission.
5. Using a 12-volt test light connected to ground, check the (T16) Transmission Control Output circuit at the appropriate terminals of Miller tool #8815.

NOTE: **The test light must illuminate brightly. Compare the brightness to that of a direct connection to the battery.**

Does the test light illuminate brightly?

Yes

- Using the schematics as a guide, check the Totally Integrated Power Module (TIPM) terminals for corrosion, damage, water intrusion, or terminal push out. Check for any Service Bulletins that may apply. If no problems are found, replace and program the TIPM per Service Information.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Repair the (T16) Transmission Control Output circuit for an open.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

4. INTERMITTENT WIRING AND CONNECTORS

1. The conditions necessary to set this DTC are not present at this time.
2. Using **Fig. 6** as a guide, inspect the wiring and connectors.
3. While monitoring the scan tool data relative to this circuit, wiggle test the wiring and connectors.
4. Look for the data to change or for the DTC to reset during the wiggle test.

Were any problems found?

Yes

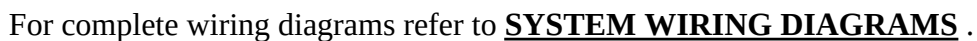
- Repair as necessary.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Test complete.

P128C-TCM POWER CONTROL CIRCUIT 2 HIGH - NGC

2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey



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2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

- **When Monitored:**

Ignition on with battery voltage greater than 10.0 volts.

- **Set Condition:**

The Totally Integrated Power Module (TIPM) has detected voltage on the Transmission Control Output circuit when none should be present.

Possible Causes
(T16) TRANSMISSION CONTROL OUTPUT CIRCUIT SHORT TO VOLTAGE TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST

1. CHECK IF THE DTC IS ACTIVE

1. Ignition on, engine not running.
2. With the scan tool, read DTCs.

Is the status Active for this DTC?

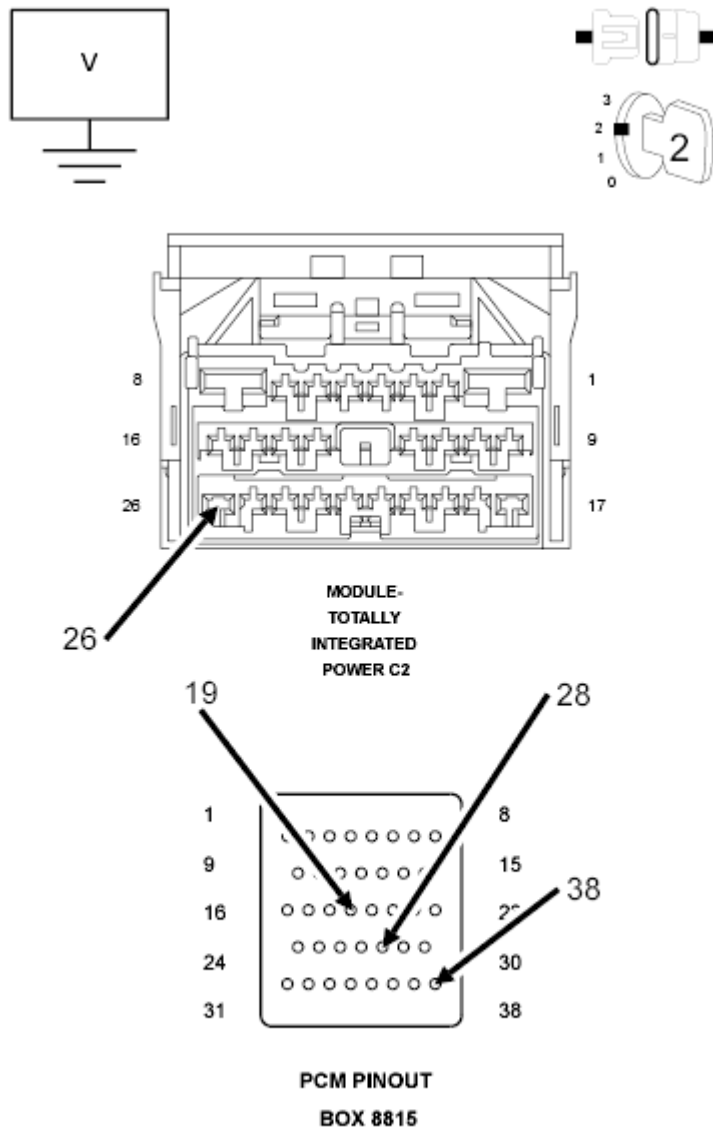
Yes

- Go to Step 2.

No

- Go to Step 3.

2. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT FOR A SHORT TO VOLTAGE



78295

Fig. 10: Measuring Voltage Of Transmission Control Output Circuit
Courtesy of CHRYSLER LLC

1. Turn the ignition off
2. Disconnect the TIPM C2 harness connector.
3. Disconnect the PCM C4 harness connector and install Miller tool #8815.

CAUTION: Do not probe the PCM harness connectors. Probing the PCM harness connectors will damage the PCM terminals resulting in poor terminal to pin connection. Install the PCM Pinout Box 8815 to perform diagnosis.

4. Measure the voltage of the (T16) Transmission Control Output circuit.

Is the voltage above 0.5 volts?

Yes

- Repair the (T16) Transmission Control Output circuit for a short to voltage.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Using the schematics as a guide, check the Totally Integrated Power Module (TIPM) terminals for corrosion, damage, water intrusion, or terminal push out. Check for any Service Bulletins that may apply. If no problems are found, replace and program the TIPM per Service Information.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

3. INTERMITTENT WIRING AND CONNECTORS

1. The conditions necessary to set this DTC are not present at this time.
2. Using **Fig. 9** as a guide, inspect the wiring and connectors.
3. While monitoring the scan tool data relative to this circuit, wiggle test the wiring and connectors.
4. Look for the data to change or for the DTC to reset during the wiggle test.

Were any problems found?

Yes

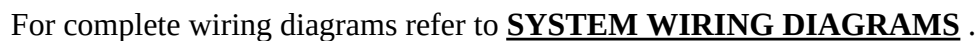
- Repair as necessary.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Test complete.

P128D-TCM POWER CONTROL CIRCUIT 2 OPEN - NGC

2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey



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2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

- **When Monitored:**

Ignition on with battery voltage greater than 10.0 volts.

- **Set Condition:**

The Totally Integrated Power Module (TIPM) has detected an open condition on the Transmission Control Output circuit.

Possible Causes
(T16) TRANSMISSION CONTROL OUTPUT CIRCUIT OPEN TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST

1. CHECK IF THE DTC IS ACTIVE

1. Ignition on, engine not running.
2. With the scan tool, select read DTCs.

Is the status Active for this DTC?

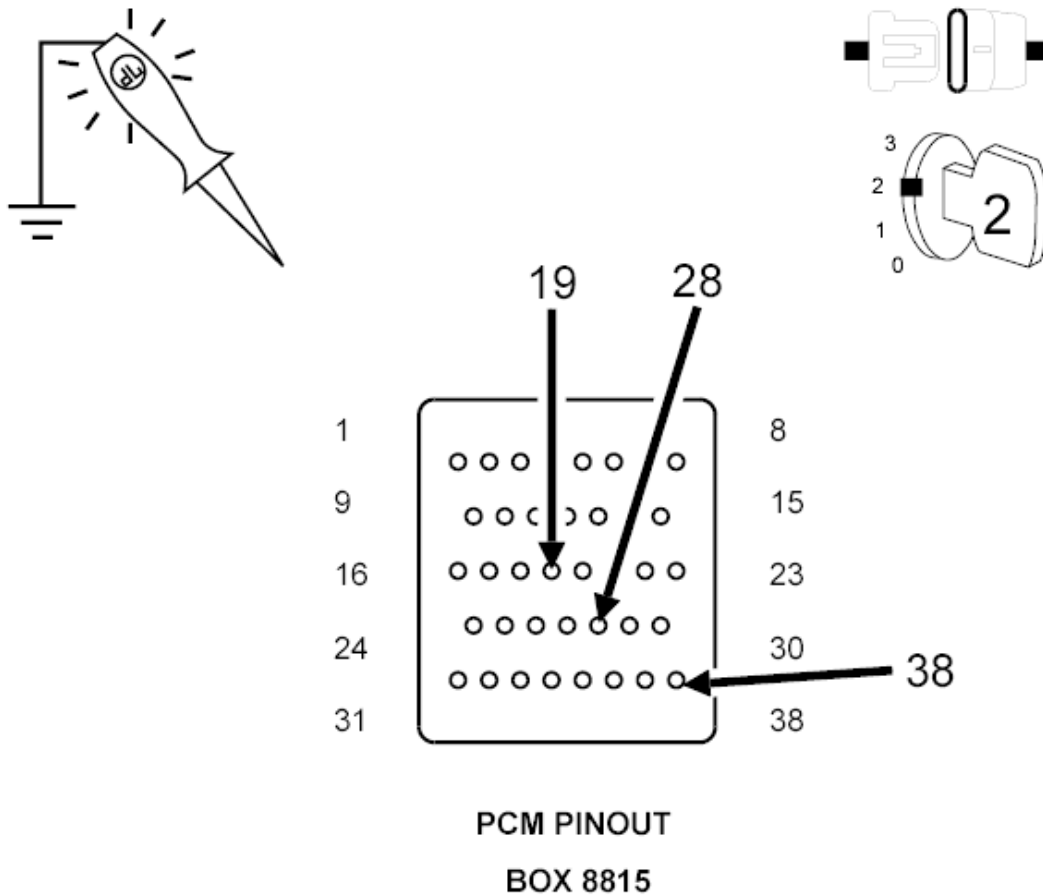
Yes

- Go to Step 2.

No

- Go to Step 3.

2. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT FOR AN OPEN



77245

Fig. 12: Checking Transmission Control Output Circuit For An Open
Courtesy of CHRYSLER LLC

1. Turn the ignition off to the lock position.
2. Disconnect the Transmission Solenoid/TRS harness connector.
3. Disconnect the PCM C4 harness connector and install Miller tool #8815.

CAUTION: Do not probe the PCM harness connectors. Probing the PCM harness connectors will damage the PCM terminals resulting in poor terminal to pin connection. Install the PCM Pinout Box 8815 to perform diagnosis.

4. Ignition on, engine not running.
5. Using the scan tool under TIPM, actuate the Transmission.

6. Using a 12-volt test light connected to ground, check the (T16) Transmission Control Output circuit at the appropriate terminal of Miller tool #8815.

NOTE: **The test light must illuminate brightly. Compare the brightness to that of a direct connection to the battery.**

Does the test light illuminate brightly?

Yes

- Using the schematics as a guide, check the Totally Integrated Power Module (TIPM) terminals for corrosion, damage, water intrusion, or terminal push out. Check for any Service Bulletins that may apply. If no problems are found, replace and program the TIPM per Service Information.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Repair the (T16) Transmission Control Output circuit for an open.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

3. INTERMITTENT WIRING AND CONNECTORS

1. The conditions necessary to set this DTC are not present at this time.
2. Using **Fig. 11** as a guide, inspect the wiring and connectors.
3. While monitoring the scan tool data relative to this circuit, wiggle test the wiring and connectors.
4. Look for the data to change or for the DTC to reset during the wiggle test.

Were any problems found?

Yes

- Repair as necessary.
- Perform 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

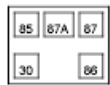
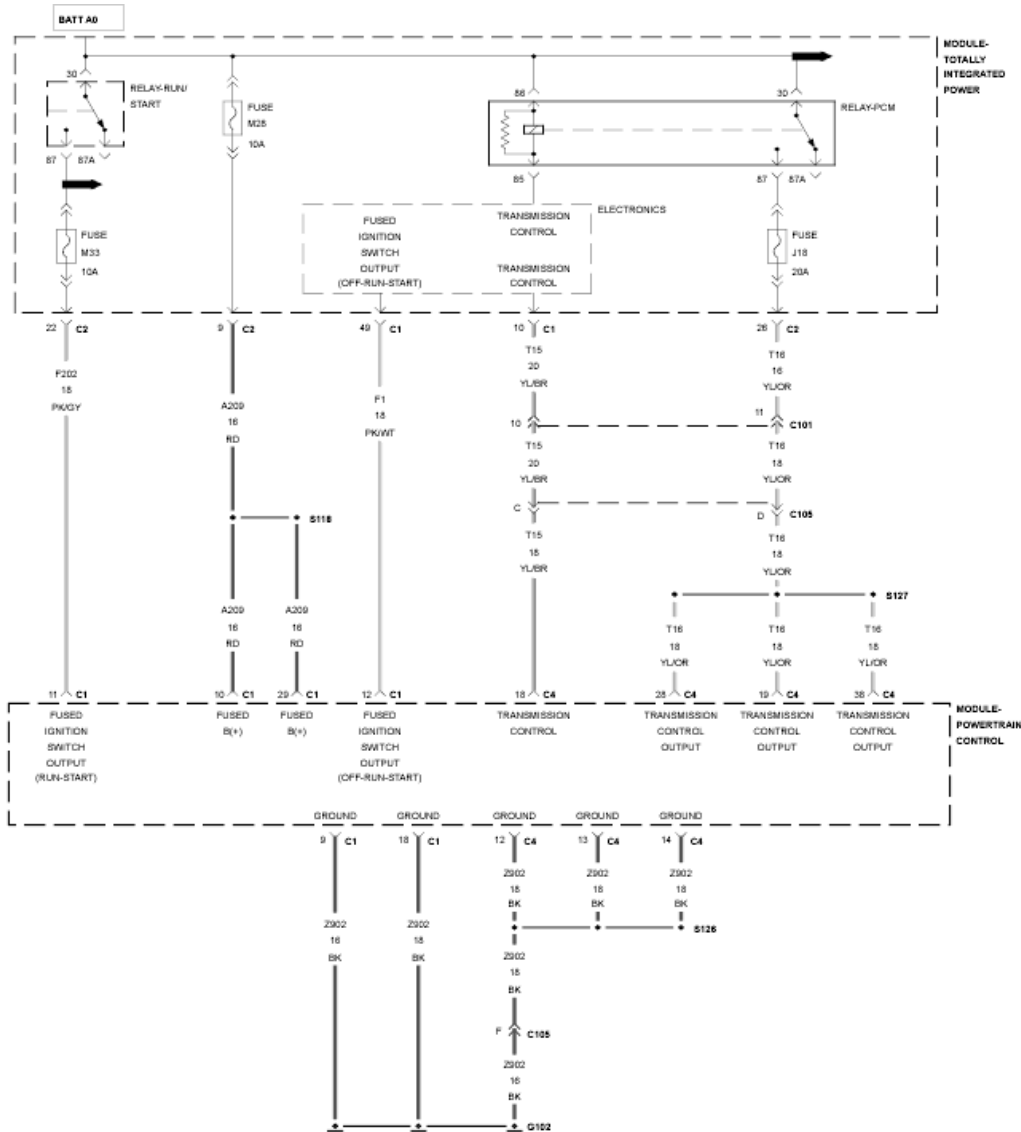
No

- Test complete.

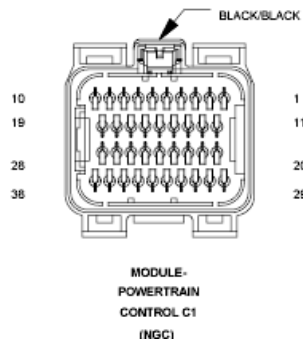
P128E-TCM POWER CONTROL CIRCUIT 2 OVERCURRENT - NGC

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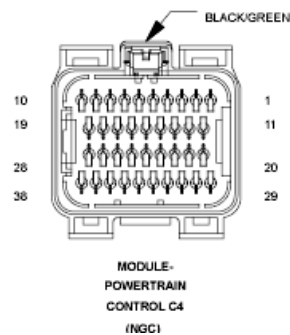
2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey



RELAY-PCM
(IN TIPM)



MODULE-
POWERTRAIN
CONTROL C1
(INGC1)



MODULE-
POWERTRAIN
CONTROL C4
(INGC1)

Fig. 13: TCM Power Control - Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

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2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

- **When Monitored:**

Ignition on with battery voltage greater than 10.0 volts.

- **Set Condition:**

The Totally Integrated Power Module (TIPM) has detected an overcurrent condition in the Transmission Control Output circuit.

Possible Causes
(T16) TRANSMISSION CONTROL OUTPUT CIRCUIT SHORT TO GROUND SOLENOID/PRESSURE SWITCH ASSEMBLY POWERTRAIN CONTROL MODULE (PCM) TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST

1. CHECK IF THE DTC IS ACTIVE

1. Ignition on, engine not running.
2. With a scan tool, read TIPM DTCs.

Is the DTC active?

Yes

- Go to Step 2.

No

- Go to Step 6.

2. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT FOR A SHORT TO GROUND

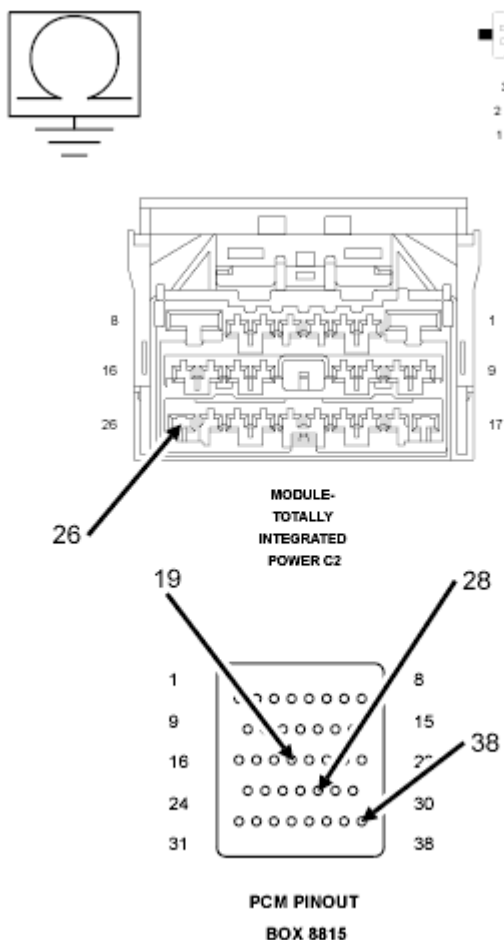


Fig. 14: Measuring Resistance Between Ground & Transmission Control Output Circuit
Courtesy of CHRYSLER LLC

1. Turn the ignition off to the lock position.
2. Remove the Transmission Control Relay from the TIPM.

NOTE: Due to different power control configurations, the Transmission Control Relay may be referred to as a PCM relay.

3. Disconnect the Transmission Solenoid/TRS Assembly harness connector.
4. Disconnect the PCM C4 harness connector and connect Miller tool #8815.

CAUTION: Do not probe the PCM harness connectors. Probing the PCM harness connectors will damage the PCM terminals resulting in poor terminal to pin connection. Install the PCM Pinout Box 8815 to perform diagnosis.

5. Measure the resistance between ground and the (T16) Transmission Control Output circuit.

Is the resistance below 100k Ohms?

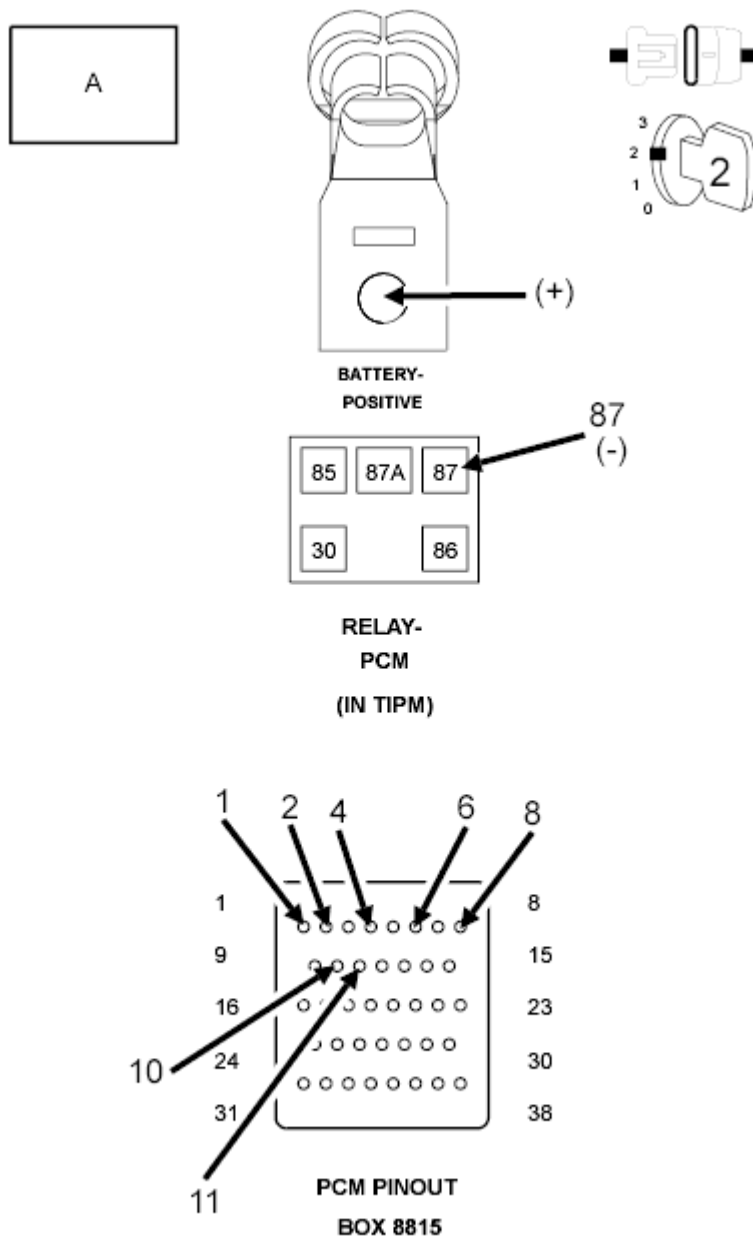
Yes

- Repair the (T16) Transmission Control Output circuit for a short to ground.
- Perform the 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST**.

No

- Go to Step 3.

3. CHECK THE (T16) TRANSMISSION CONTROL OUTPUT CIRCUIT



78307

Fig. 15: Checking Transmission Control Output Circuit
Courtesy of CHRYSLER LLC

1. Reconnect the PCM C4 harness connector.
2. Reconnect the Transmission Solenoid/TRS Assembly harness connector.
3. Connect the positive probe of an ammeter to battery positive and connect the negative probe to the (T16) Transmission Control Output circuit in the Relay connector in the TIPM.
4. Read the amperage on the ammeter.

Does the amperage read below 1.0 amp?

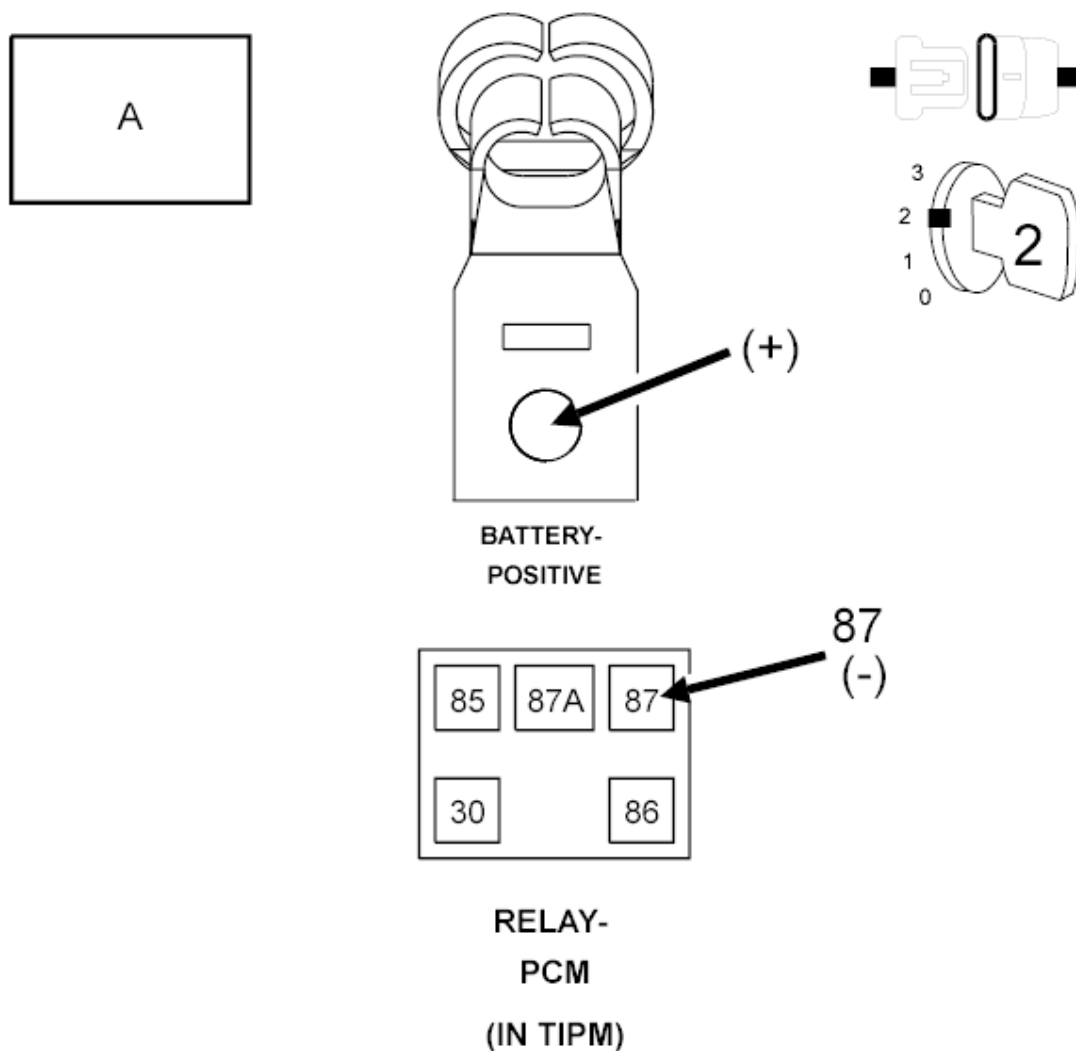
Yes

- Go to Step 5.

No

- Go to Step 4.

4. CHECK THE POWERTRAIN CONTROL MODULE



78283

Fig. 16: Checking Powertrain Control Module
Courtesy of CHRYSLER LLC

1. Disconnect the ammeter from battery positive.
2. Disconnect the PCM C4 harness connector and connect the PCM Pinout Box 8815.
3. Reconnect the positive probe of an ammeter to battery positive.
4. Read the amperage on the ammeter.

Does the amperage read below 2.0 amps?

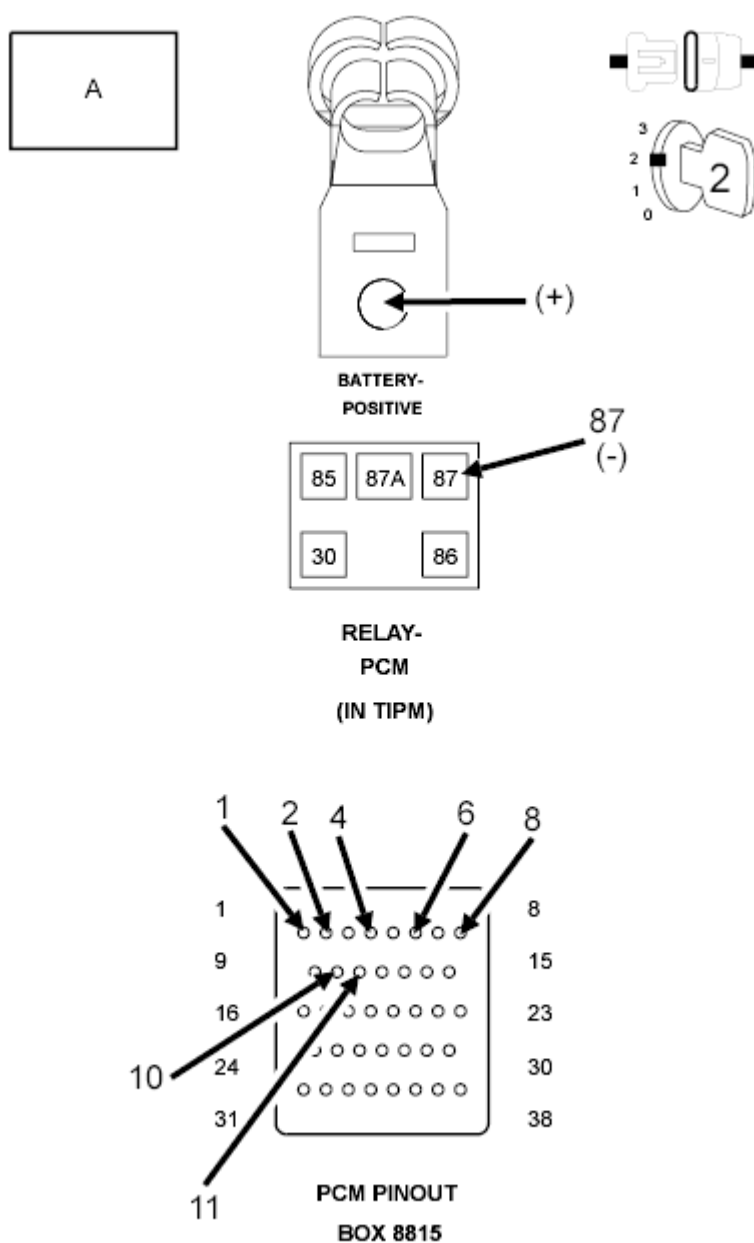
Yes

- Using the schematics as a guide, check the Powertrain Control Module (PCM) terminals for corrosion, damage, or terminal push out. Pay particular attention to all power and ground circuits. If no problems are found, replace and program the PCM in accordance with the Service Information. With the scan tool, perform Quick Learn.
- Perform the 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Go to Step 5.

5. CHECK THE TRANSMISSION SOLENOIDS



78307

Fig. 17: Checking Transmission Solenoids
Courtesy of CHRYSLER LLC

1. Disconnect the ammeter from battery positive.
2. Disconnect the PCM C4 harness connector and connect the PCM Pinout Box 8815.
3. Reconnect the positive probe of the ammeter to battery positive.
4. Monitor the amperage on the ammeter in the following step.
5. Using a jumper wire, momentarily jump each solenoid control circuit to ground one at a time in the appropriate terminals of the PCM Pinout Box 8815.

TYPE OF SOLENOID	AMPERAGE READING
VARIABLE FORCE SOLENOID (VFS)	2000 milliamps (mA) $\pm$ 10%
CLUTCH SOLENOID	6.0 to 6.5 amps

6. INTERMITTENT WIRING AND CONNECTORS

1. The conditions necessary to set the DTC are not present at this time.
2. Using **Fig. 13** as a guide, inspect the wiring and connectors specific to this circuit.
3. Wiggle the wires while checking for shorted and open circuits.
4. With the scan tool, check the Event Data to help identify the conditions in which the DTC was set.

Were there any problems found?

Yes

- Repair as necessary.
- Perform the 62TE VERIFICATION TEST. Refer to **62TE TRANSMISSION VERIFICATION TEST** .

No

- Test Complete.

P129C-INVERTER CONTROL CIRCUIT HIGH

2009 Dodge Journey R/T

2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

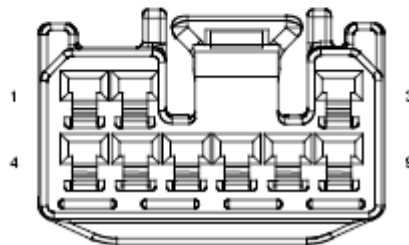
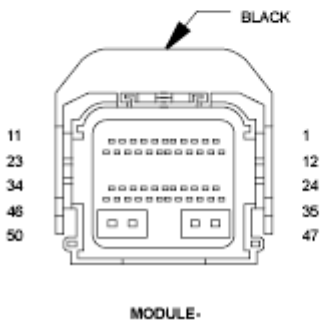
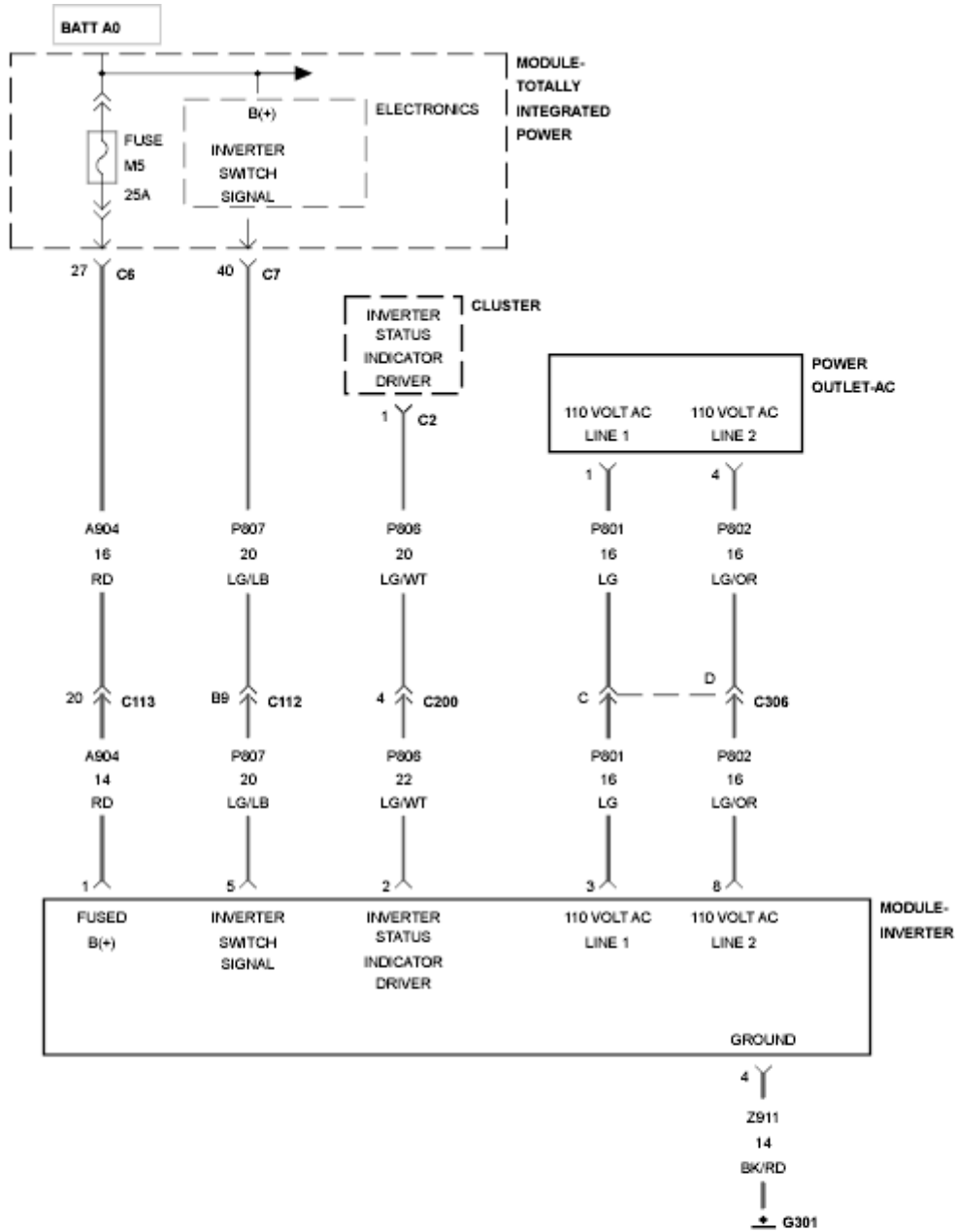


Fig. 18: Inverter Control - Circuit Schematic

Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on and battery voltage greater than 10 volts. Once the inverter switch is turned on, the Cluster (CCN) sends a request to the Totally Integrated Power Module (TIPM) to turn on the Inverter.

- **Set Condition:**

If the TIPM detects an open or short high condition on the (P807) Inverter Switch Signal circuit.

Possible Causes
(P807) INVERTER SWITCH SIGNAL CIRCUIT SHORTED TO VOLTAGE
(P807) INVERTER SWITCH SIGNAL CIRCUIT OPEN
INVERTER MODULE
TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST**1. TEST FOR INTERMITTENT CONDITION**

1. Turn the ignition on.
2. With the scan tool, record and erase DTCs.
3. Operate the Inverter switch several times.
4. With the scan tool, read DTCs.

Is the DTC active at this time?

Yes

- Go to Step 2.

No

- The conditions that caused this code to set are not present at this time. Using **Fig. 18** as a guide, inspect the wiring and connectors. Look for chafed, pierced, pinched, or partially broken wires and broken, bent, pushed out, spread, corroded, or contaminated terminals.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

2. CHECK (P807) INVERTER SWITCH SIGNAL CIRCUIT FOR A SHORT TO VOLTAGE

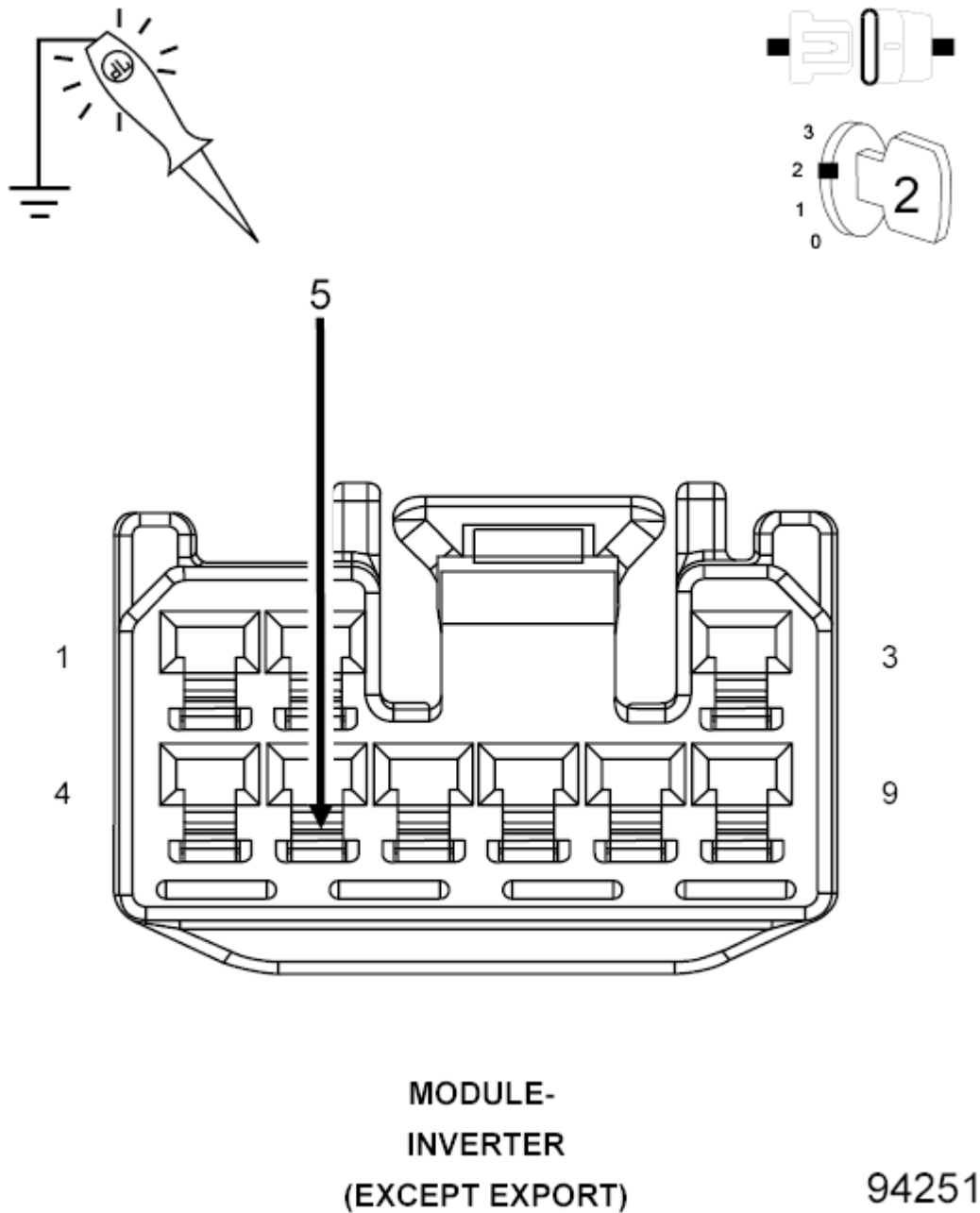


Fig. 19: Checking Inverter Switch Signal Circuit For A Short To Voltage
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the Inverter Module harness connector.
3. Disconnect the TIPM C7 harness connector.
4. Turn the ignition on.
5. Using a 12-volt test light connected to ground, check the (P807) Inverter Switch Signal circuit at the Inverter Module harness connector.

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Does the test light illuminate?

Yes

- Repair the (P807) Inverter Switch Signal circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 3.

3. CHECK (P807) INVERTER SWITCH SIGNAL CIRCUIT FUNCTION

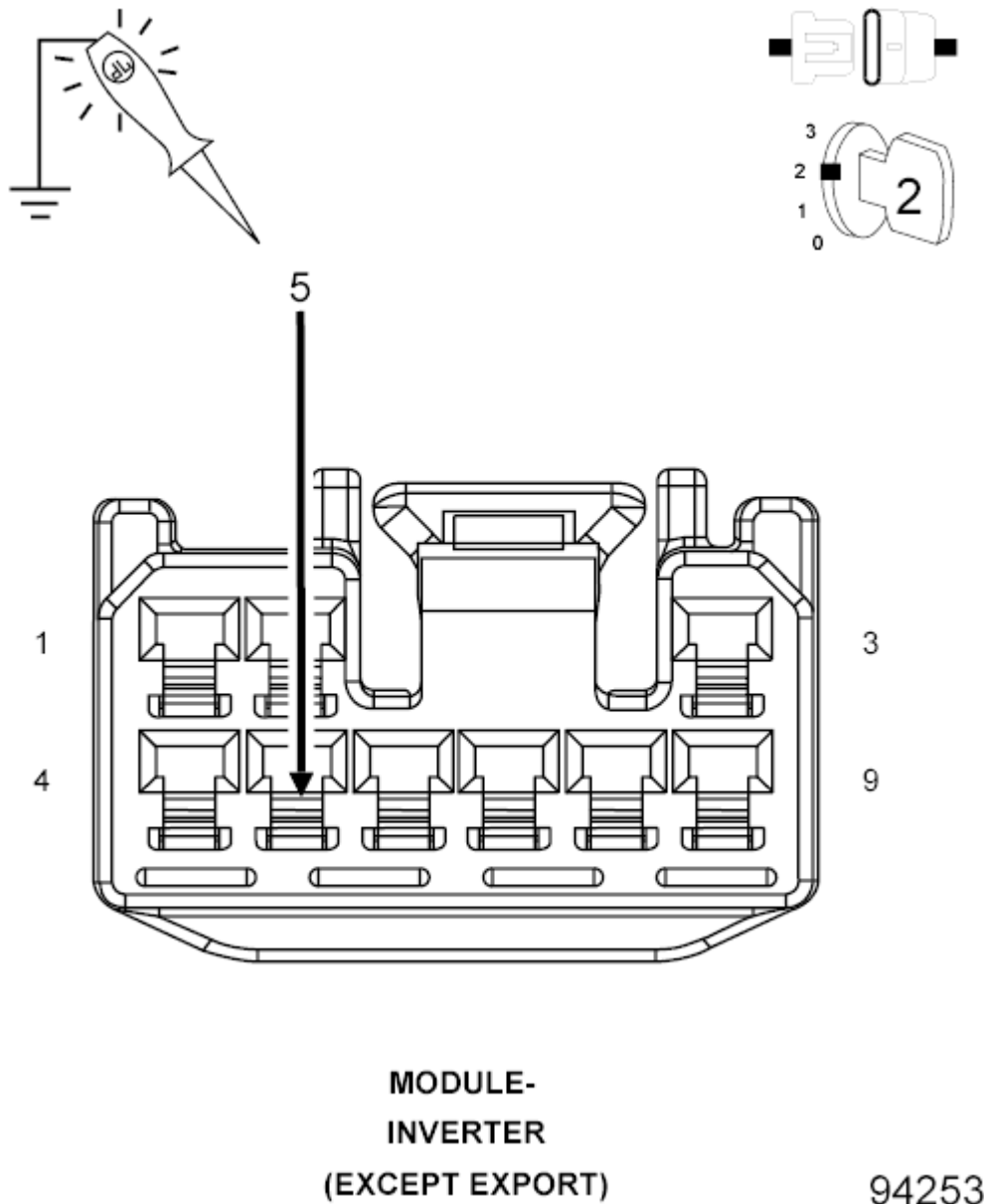


Fig. 20: Checking Inverter Switch Signal Circuit Function
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Reconnect the C7 TIPM harness connector.
3. Using a 12-volt test light connected to ground, probe the (P807) Inverter Switch Signal circuit at the Inverter Module harness connector.
4. Using the scan tool, actuate the Inverter Enable control.

NOTE: The test light should be illuminated and brightly. Compare the brightness to that of a direct connection to the battery.

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Does the test light illuminate brightly?

Yes

- Replace the Inverter Module in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 4.

4. CHECK (P807) INVERTER SWITCH SIGNAL CIRCUIT FOR AN OPEN

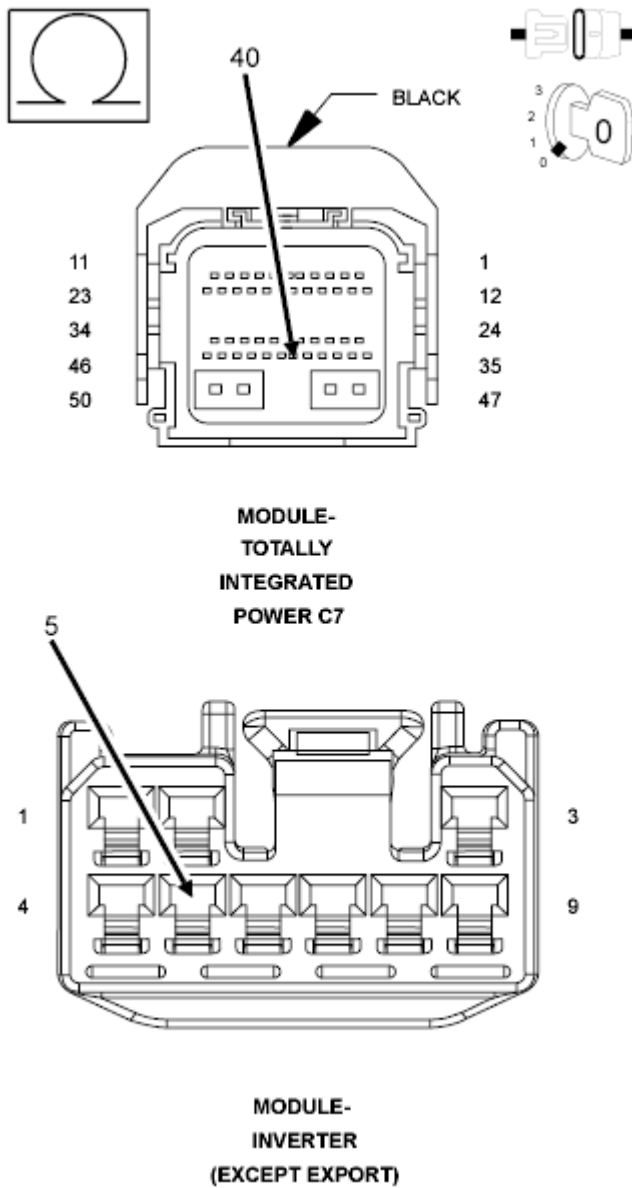


Fig. 21: Measuring Resistance Of Inverter Switch Signal Circuit Between TIPM Harness Conn & Inverter Module Harness Conn
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the C7 TIPM harness connector.
3. Measure the resistance of the (P807) Inverter Switch Signal circuit between the TIPM harness connector and the Inverter Module harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Replace the Totally Integrated Power Module (TIPM) in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Repair the (P807) Inverter Switch Signal circuit for an open.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

P129E-INVERTER CONTROL CIRCUIT OVERCURRENT

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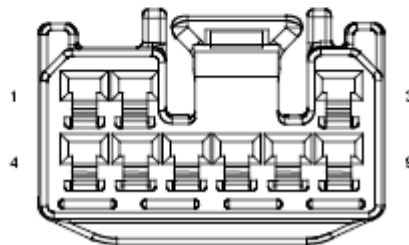
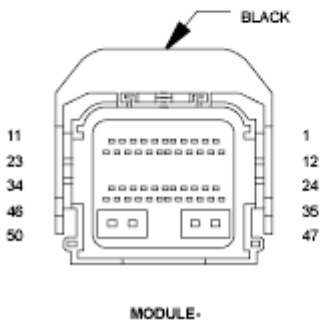
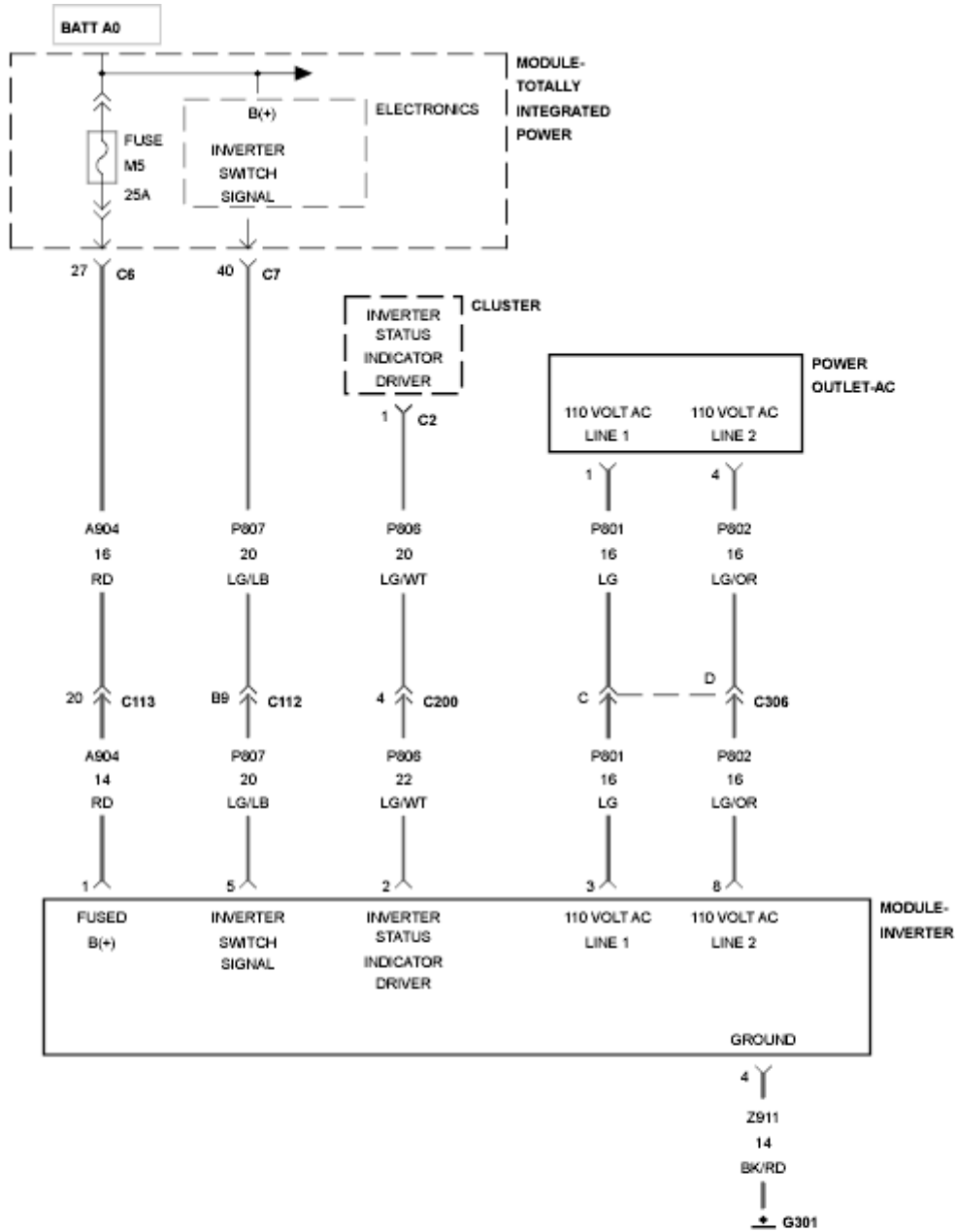


Fig. 22: Inverter Control - Circuit Schematic

Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on and battery voltage greater than 10 volts.

- **Set Condition:**

If the Totally Integrated Power Module (TIPM) detects an overcurrent condition on the (P807) Inverter Switch Signal circuit.

Possible Causes
TERMINAL DAMAGE OR CORROSION (P807) INVERTER SWITCH SIGNAL CIRCUIT SHORTED TO GROUND INVERTER MODULE TOTALLY INTEGRATED POWER MODULE (TIPM)

DIAGNOSTIC TEST**1. TEST FOR INTERMITTENT CONDITION**

NOTE: Look closely at the temperatures at which this DTC set. Low battery voltage can also cause excessive current draw in very hot and very cold ambient temperatures. Make sure the battery can pass a load test before continuing.

1. Turn the ignition on.
2. With the scan tool, record and erase DTCs.
3. Operate the Inverter switch several times.
4. With the scan tool, read DTCs.

Is the DTC Active at this time?

Yes

- Go to Step 2.

No

- The conditions that caused this code to set are not present at this time. Using **Fig. 22** as a guide, inspect the wiring and connectors. Look for chafed, pierced, pinched, or partially broken wires and broken, bent, pushed out, spread, corroded, or contaminated terminals.

- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

2. CHECK (P807) INVERTER SWITCH SIGNAL CIRCUIT FOR A SHORT TO GROUND

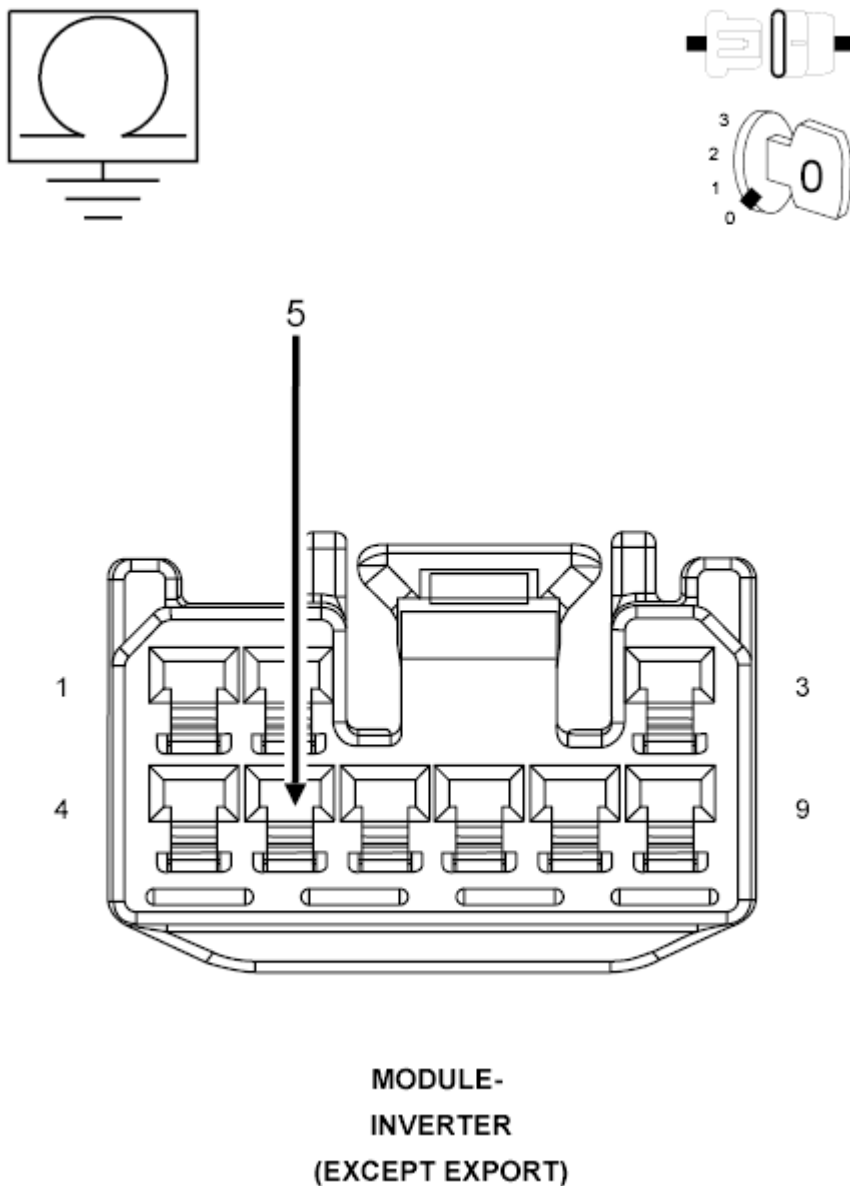


Fig. 23: Measuring Resistance Of Inverter Switch Signal Circuit Between Ground At Inverter Module Harness Connector
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the C7 TIPM harness connector.
3. Disconnect the Inverter Module harness connector.

4. Inspect the wiring connections for corrosion and repair as necessary.
5. Measure the resistance of the (P807) Inverter Switch Signal circuit between ground at the Inverter Module harness connector.

Is the resistance below 10k Ohms?

Yes

- Repair the (P807) Inverter Switch Signal circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 3.

3. CHECK (P807) INVERTER SWITCH SIGNAL CIRCUIT FUNCTION

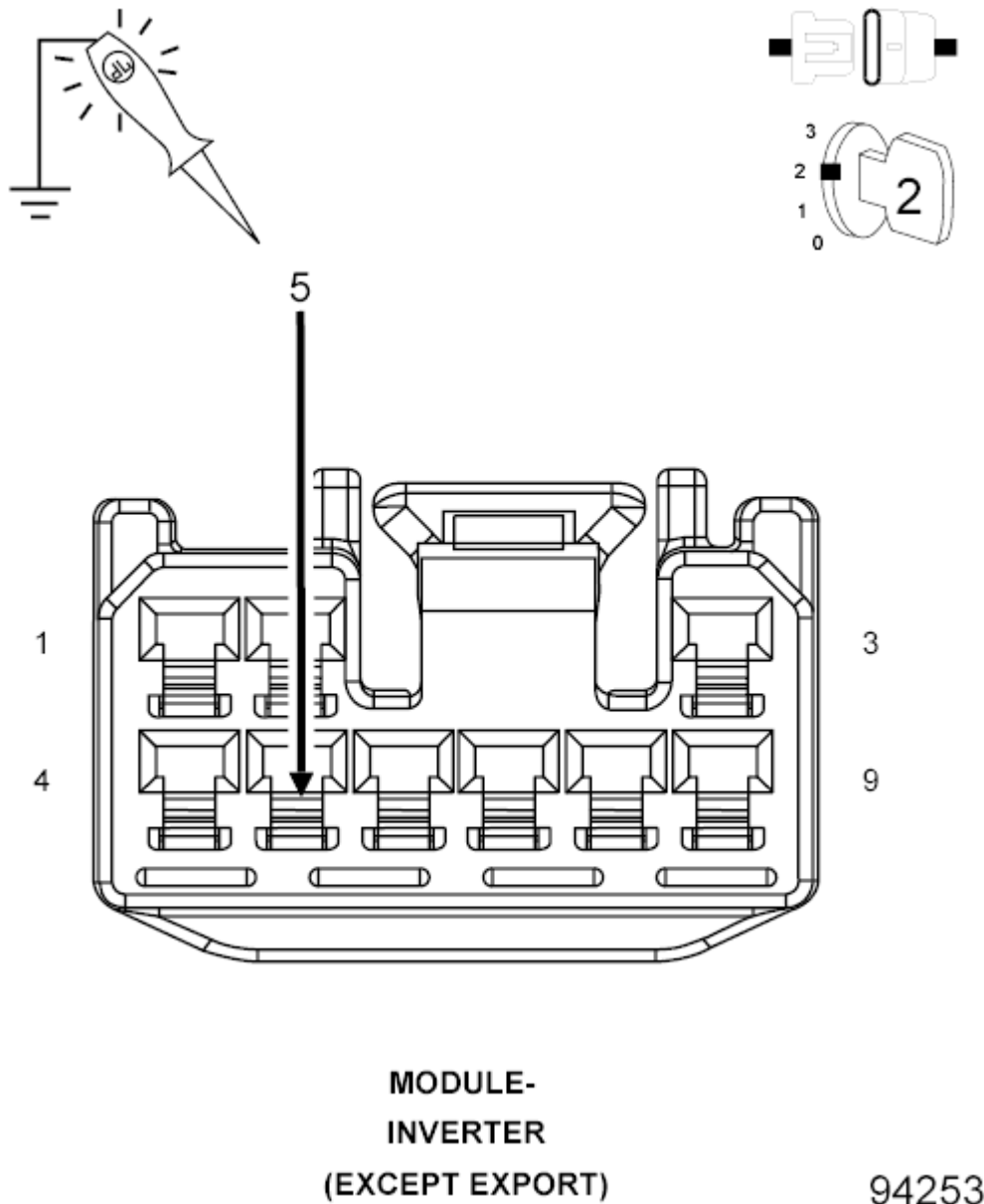


Fig. 24: Checking Inverter Switch Signal Circuit Function
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Reconnect the C7 TIPM harness connector.
3. Using a 12-volt test light connected to ground, probe the (P807) Inverter Switch Signal circuit at the Inverter Module harness connector.
4. Turn the ignition on.
5. Using the scan tool, actuate the Inverter Enable control.

NOTE: The test light should be illuminated and bright. Compare the

brightness to that of a direct connection to the battery.

Does the test light illuminate brightly?

Yes

- Replace the Inverter Module in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace the Totally Integrated Power Module (TIPM) in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

P2067-FUEL LEVEL SENSOR 2 CIRCUIT LOW

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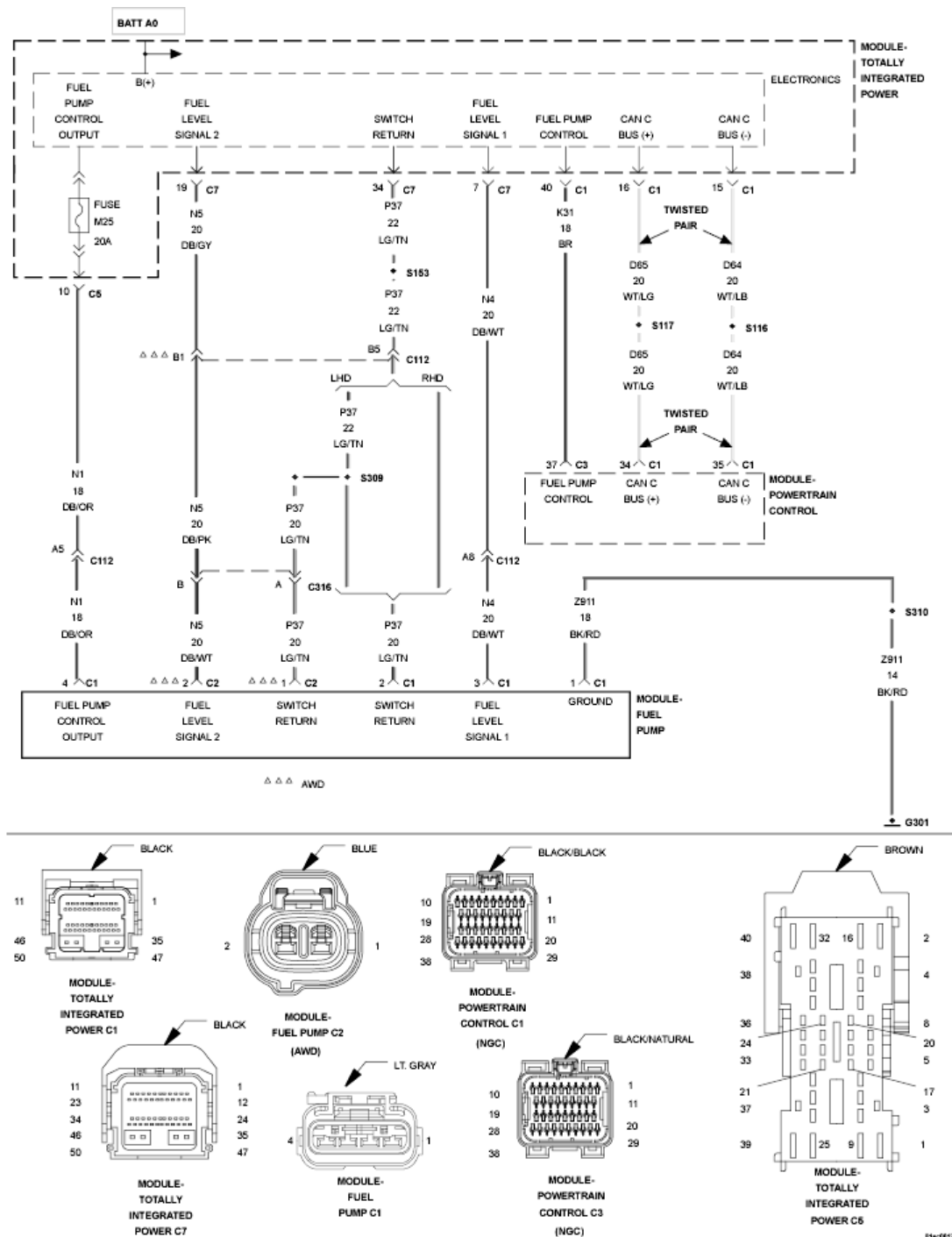


Fig. 25: Fuel Pump Module & TIPM - Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

- When Monitored:**

With the ignition on and battery voltage greater than 10.4 volts.

• **Set Condition:**

The Fuel Level Sensor 2 input voltage is below the minimum acceptable value.

Possible Causes
(N5) FUEL LEVEL SIGNAL 2 CIRCUIT SHORTED TO GROUND
(N5) FUEL LEVEL SIGNAL 2 CIRCUIT OPEN OR HIGH RESISTANCE
FUEL LEVEL SENSOR 2
TOTALLY INTEGRATED POWER MODULE (TIPM)

Always perform the Pre-Diagnostic Troubleshooting procedure before proceeding. Refer to PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC .

DIAGNOSTIC TEST

1. DTC IS ACTIVE

NOTE: Diagnose and repair any system voltage DTCs before continuing with this test.

NOTE: Diagnose and repair any communication DTCs before continuing with this test.

1. Start the engine and allow it to reach operating temperature.

WARNING: When the engine is operating, do not stand in direct line with the fan. Do not put your hands near the pulleys, belts or fan. Do not wear loose clothing. Failure to follow these instructions may result in possible serious or fatal injury.

2. With the scan tool, select View DTCs.

Is the DTC Active at this time?

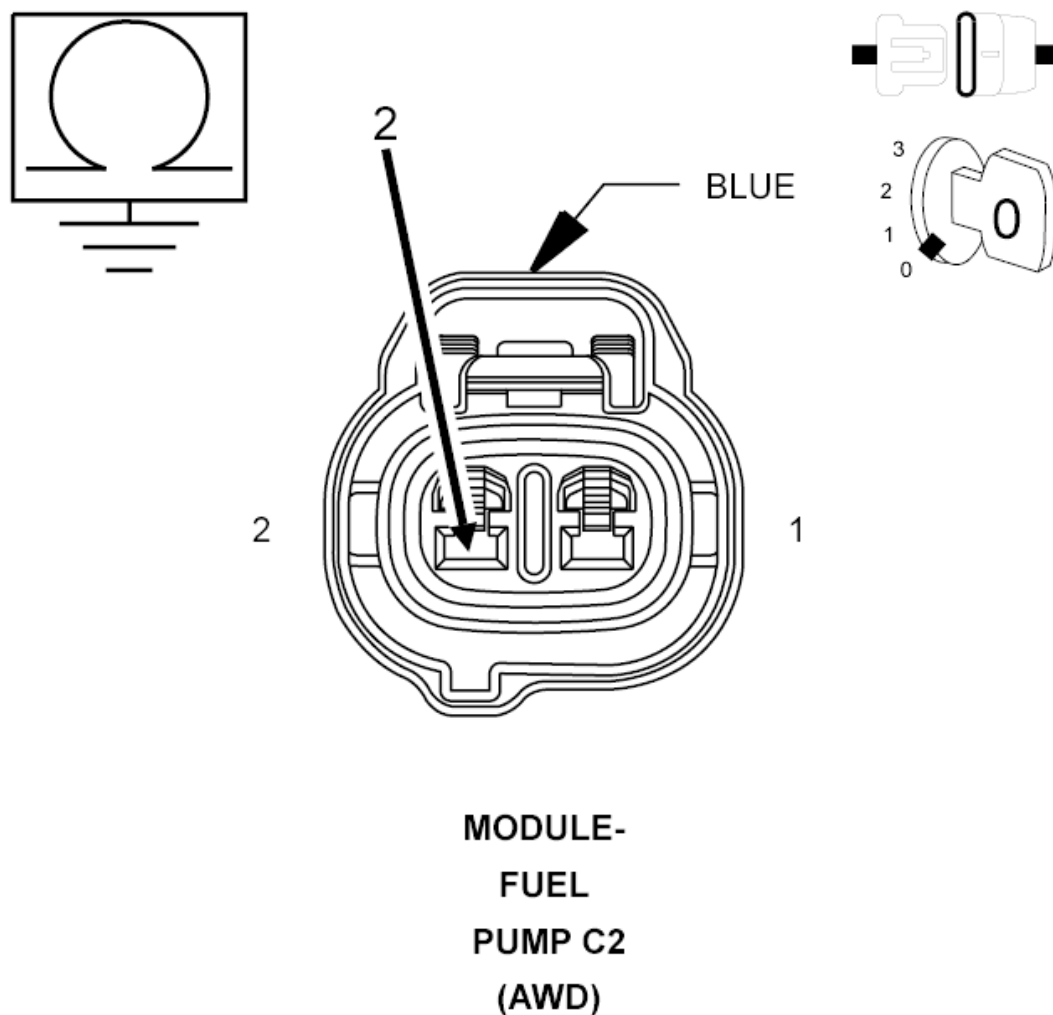
Yes

- Go to Step 2.

No

- Refer to the CHECKING FOR AN INTERMITTENT DTC Diagnostic Procedure. Refer to PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC .

2. (N5) FUEL LEVEL SIGNAL 2 CIRCUIT SHORTED TO GROUND



104542

Fig. 26: Measuring Resistance Between Ground & Fuel Level Signal 2 Circuit In C2 Fuel Pump Module Harness Connector
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the C2 Fuel Pump Module harness connector.
3. Disconnect the C7 Totally Integrated Power Module (TIPM) harness connector.
4. Measure the resistance between ground and the (N5) Fuel Level Signal 2 circuit in the C2 Fuel Pump Module harness connector.

Is the resistance above 100 Ohms?

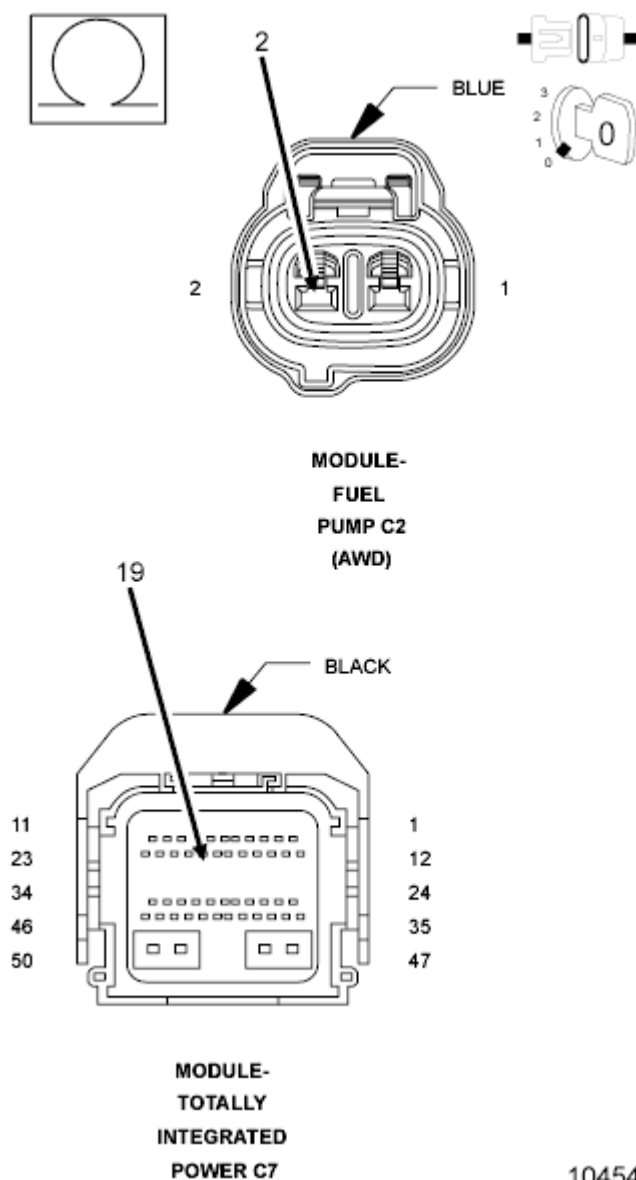
Yes

- Go to Step 3.

No

- Repair the short to ground in the (N5) Fuel Level Signal 2 circuit.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

3. (N5) FUEL LEVEL SIGNAL 2 CIRCUIT OPEN CIRCUIT OR HIGH RESISTANCE



104544

Fig. 27: Measuring Resistance Of Fuel Level Signal 2 Circuit Between C2 Fuel Pump Module

Harness Conn & C7 TIPM Harness Conn
Courtesy of CHRYSLER LLC

1. Measure the resistance of the (N5) Fuel Level Signal 2 circuit between the C2 Fuel Pump Module harness connector and the C7 TIPM harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Go to Step 4.

No

- Repair the open or high resistance in the (N5) Fuel Level Signal 2 circuit.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

4. FUEL TANK WIRING HARNESS INSPECTION

WARNING: The fuel system is under a constant pressure (even with the engine off). Before testing or servicing any fuel system hose, fitting or line, the fuel system pressure must be released. Failure to follow these instructions can result in possible serious or fatal injury.

1. Remove the fuel tank in accordance with the Service Information.
2. Inspect the wiring and connectors between the C2 Fuel Pump Module harness connector and the Fuel Level Sensor 2 connector.
3. Look for any chafed, pierced, pinched, shorted, or broken wires.
4. Look for broken, bent, pushed out or corroded terminals.

Were any problems found?

Yes

- Repair as necessary.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Go to Step 5.

5. FUEL LEVEL SENSOR 2

1. Turn the ignition off.
2. Connect the C2 Fuel Pump Module harness connector.
3. Connect the C7 TIPM harness connector.
4. Turn the ignition on.
5. With the scan tool, read the Fuel Level Sensor 2 signal voltage.

NOTE: The sensor voltage should be approximately 5.0 volts (plus or minus .1 volt) with the Fuel Level Sensor 2 harness connector disconnected.

Does the scan tool display the voltage as described above?

Yes

- Replace the Fuel Level Sensor 2 in accordance with the service information.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Go to Step 6.

6. TOTALLY INTEGRATED POWER MODULE (TIPM)

1. Using **Fig. 25** as a guide, inspect the wiring and connectors between the Fuel Level Sensor 2 harness connector and the Totally Integrated Power Module (TIPM).
2. Look for any chafed, pierced, pinched, or partially broken wires.
3. Look for broken, bent, pushed out or corroded terminals.
4. Refer to any Technical Service Bulletins that may apply.

Were any problems found?

Yes

- Repair as necessary.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Replace and program the Totally Integrated Power Module (TIPM) in accordance with the Service Information.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING**

P2068-FUEL LEVEL SENSOR 2 CIRCUIT HIGH



Fig. 28: Fuel Pump Module & TIPM - Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on and battery voltage greater than 10.4 volts.

- **Set Condition:**

The Fuel Level Sensor 2 input voltage is above the maximum acceptable value.

Possible Causes
(N5) FUEL LEVEL SIGNAL 2 CIRCUIT SHORTED TO VOLTAGE
(N5) FUEL LEVEL SIGNAL 2 CIRCUIT OPEN
(P37) SWITCH RETURN CIRCUIT OPEN
FUEL LEVEL SENSOR 2
TOTALLY INTEGRATED POWER MODULE (TIPM)

Always perform the Pre-Diagnostic Troubleshooting procedure before proceeding. Refer to PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC

DIAGNOSTIC TEST

1. DTC IS ACTIVE

NOTE: Diagnose and repair any system voltage DTCs before continuing with this test.

NOTE: Diagnose and repair any communication DTCs before continuing with this test.

1. Start the engine and allow it to reach operating temperature.

WARNING: When the engine is operating, do not stand in direct line with the fan. Do not put your hands near the pulleys, belts or fan. Do not wear loose clothing. Failure to follow these instructions may result in possible serious or fatal injury.

2. With the scan tool, select View DTCs.

Is the DTC Active at this time?

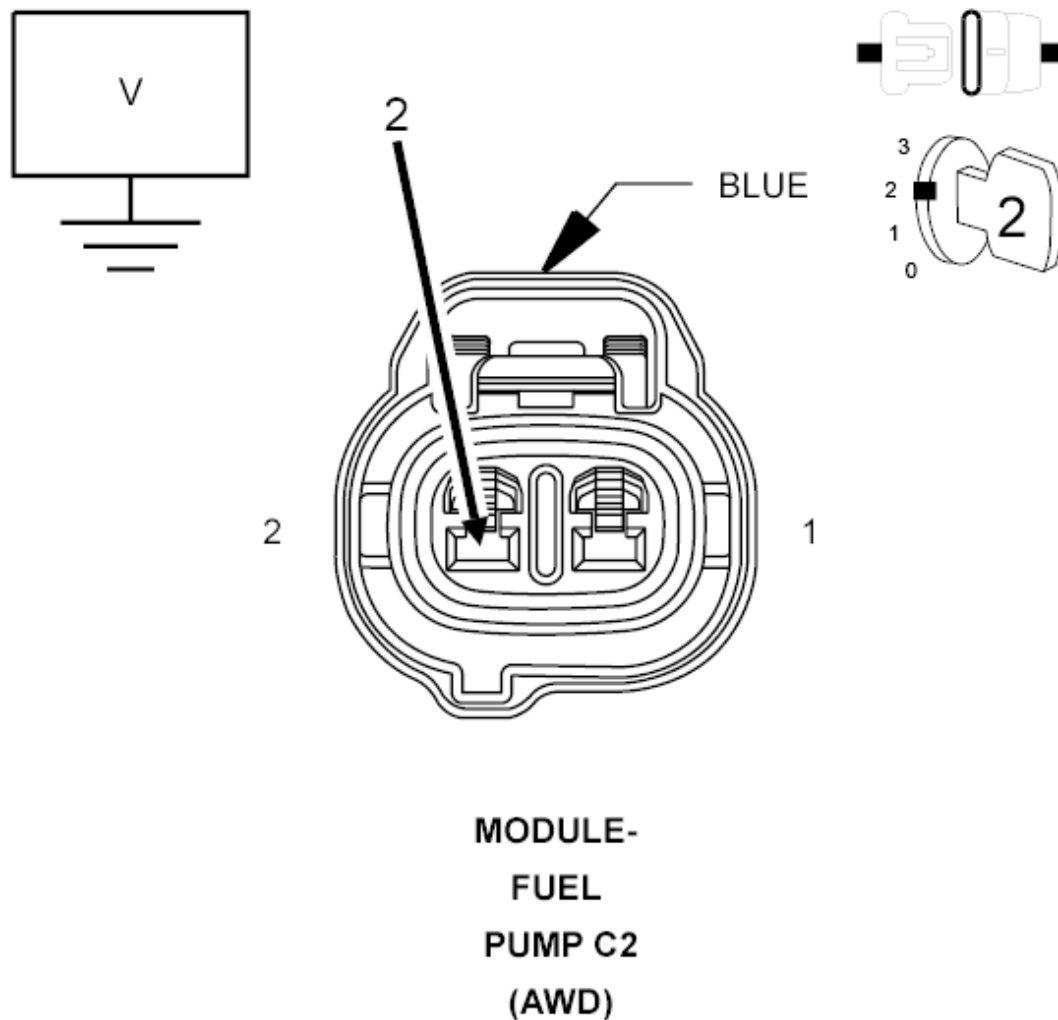
Yes

- Go to Step 2.

No

- Refer to the CHECKING FOR AN INTERMITTENT DTC Diagnostic Procedure. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

2. (N5) FUEL LEVEL SIGNAL 2 CIRCUIT SHORTED TO VOLTAGE



104540

Fig. 29: Measuring Voltage Of Fuel Level Signal 2 Circuit In C2 Fuel Pump Module Harness Connector

Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the C2 Fuel Pump Module harness connector.

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3. Disconnect the C7 TIPM harness connector.
4. Turn the ignition on.
5. Measure the voltage of the (N5) Fuel Level Signal 2 circuit in the C2 Fuel Pump Module harness connector.

Is there any voltage present?

Yes

- Repair the short to voltage in the (N5) Fuel Level Signal 2 circuit.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Go to Step 3.

3. (N5) FUEL LEVEL SIGNAL 2 OPEN

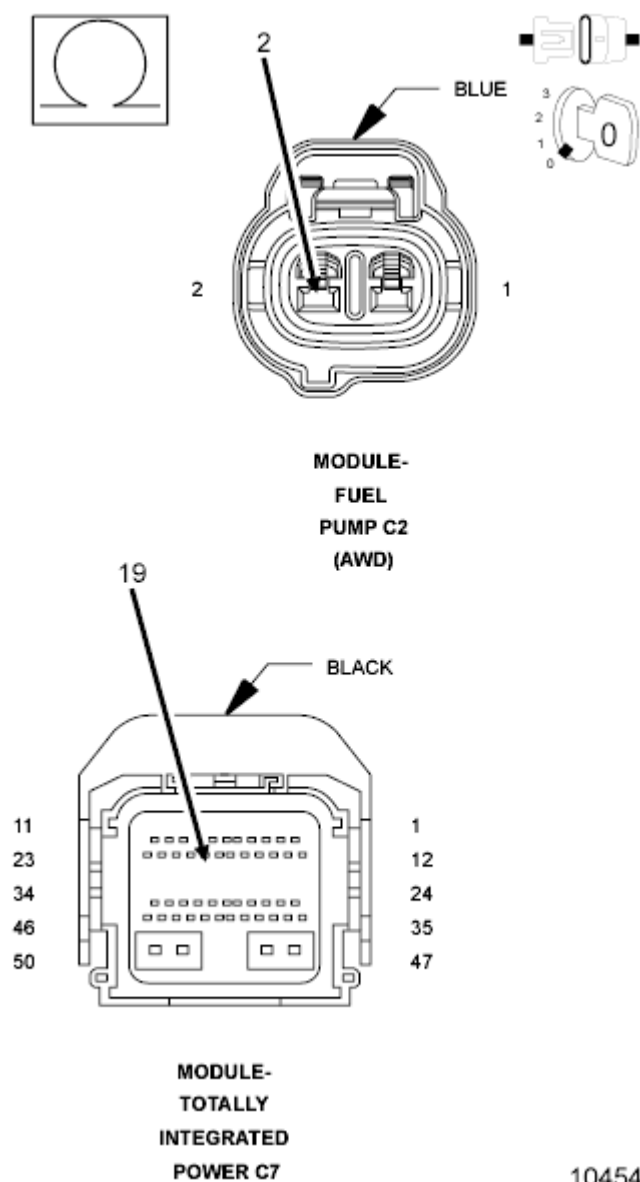


Fig. 30: Measuring Resistance Of Fuel Level Signal 2 Circuit Between C2 Fuel Pump Module Harness Conn & C7 TIPM Harness Conn
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance of the (N5) Fuel Level Signal 2 circuit between the C2 Fuel Pump Module harness connector and the C7 TIPM harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Go to Step 4.

No

- Repair the open in the (N5) Fuel Level Signal 2 circuit.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

4. (P37) SWITCH RETURN CIRCUIT OPEN

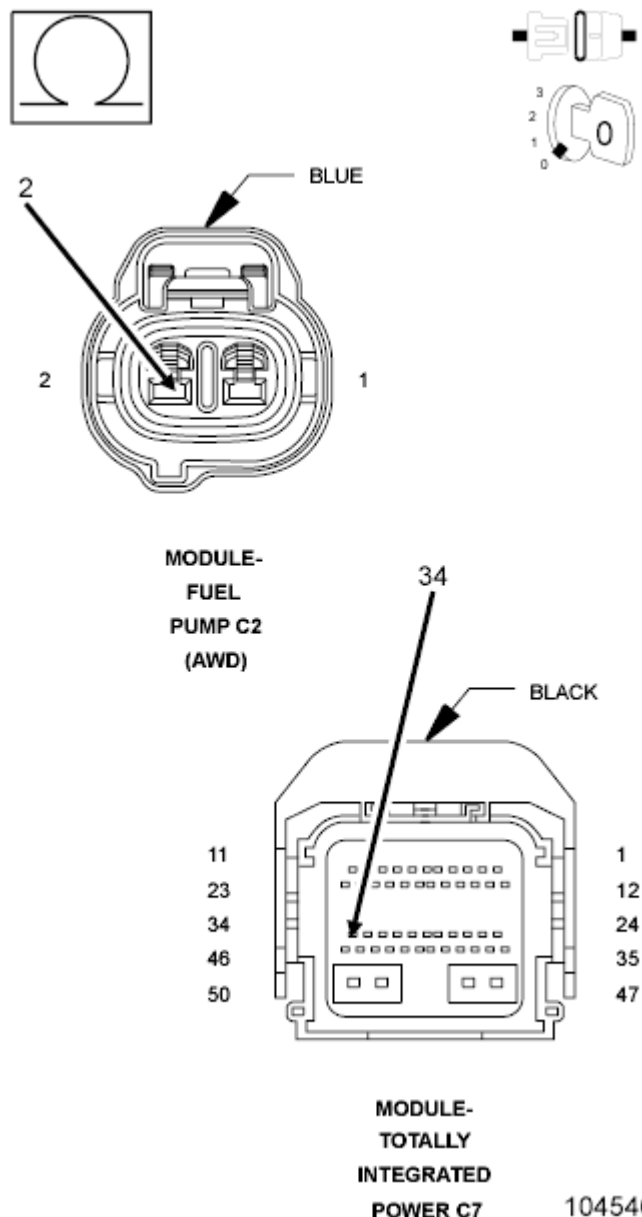


Fig. 31: Measuring Resistance In Switch Return Circuit From C2 Fuel Pump Module Harness Conn To C7 TIPM Harness Conn

Courtesy of CHRYSLER LLC

1. Measure the resistance in the (P37) Switch Return circuit from the C2 Fuel Pump Module harness connector to the C7 TIPM harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Go to Step 5.

No

- Repair the open in the (P37) Switch Return circuit.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

5. FUEL TANK WIRING HARNESS INSPECTION

WARNING: The fuel system is under a constant pressure (even with the engine off). Before testing or servicing any fuel system hose, fitting or line, the fuel system pressure must be released. Failure to follow these instructions can result in possible serious or fatal injury.

1. Remove the fuel tank in accordance with the Service Information.
2. Inspect the wiring and connectors between the C2 Fuel Pump Module harness connector and the Fuel Level Sensor 2 connector.
3. Look for any chafed, pierced, pinched, shorted, or broken wires.
4. Look for broken, bent, pushed out or corroded terminals.

Were any problems found?

Yes

- Repair as necessary.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Go to Step 6.

6. FUEL LEVEL SENSOR 2

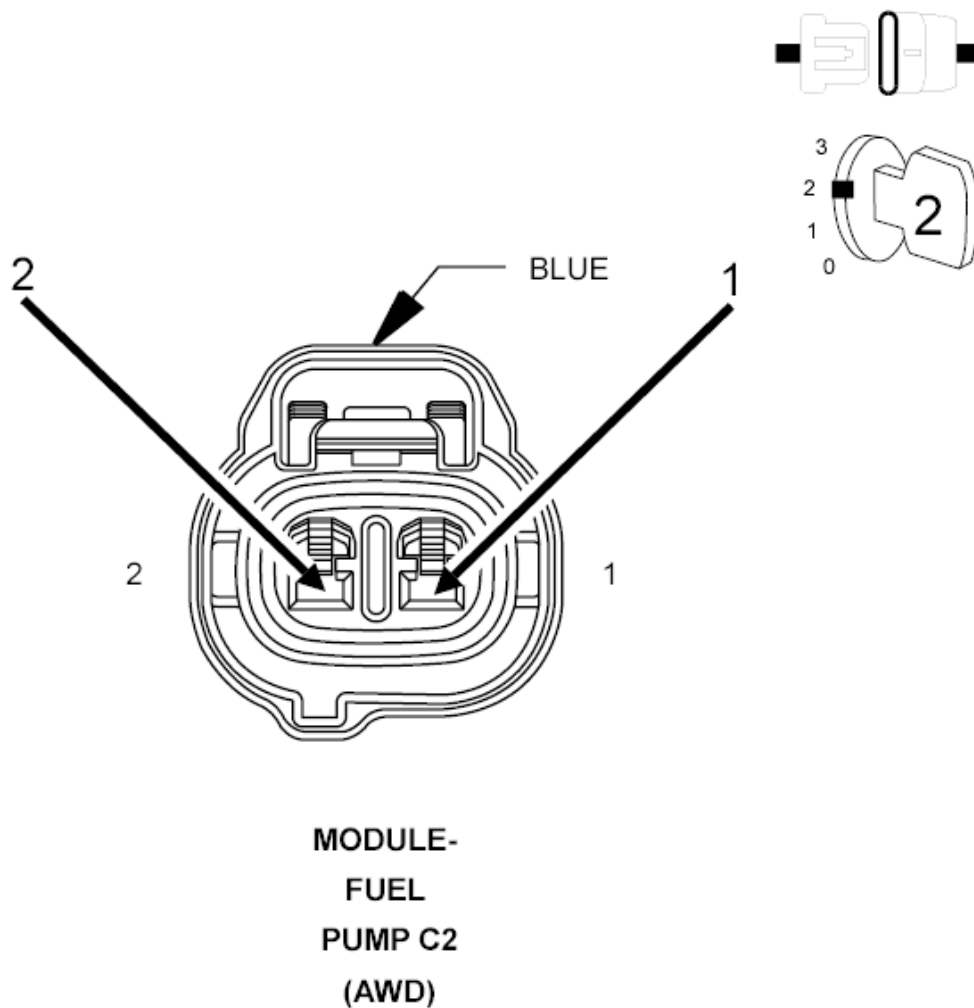


Fig. 32: Identifying C2 Fuel Pump Module Harness Connector
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Connect the C7 TIPM harness connector.
3. Connect a jumper wire between the (P37) Switch Return circuit and the (N5) Fuel Level Signal 2 circuit in the C2 Fuel Pump Module harness connector.
4. Turn the ignition on.
5. With the scan tool, read the Fuel Level Sensor 2 voltage.

NOTE: The sensor voltage should be approximately 0.0 volts (plus or minus .1 volt) with the jumper wire in place.

Does the scan tool display the voltage as described above?

Yes

- Replace the Fuel Level Sensor 2 in accordance with the Service Information.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Go to Step 7.

7. TOTALLY INTEGRATED POWER MODULE (TIPM)

1. Using **Fig. 28** as a guide, inspect the wiring and connectors between the Fuel Level Sensor 2 harness connector and the Totally Integrated Power Module (TIPM).
2. Look for any chafed, pierced, pinched, or partially broken wires.
3. Look for broken, bent, pushed out or corroded terminals.
4. Refer to any Technical Service Bulletins that may apply.

Were any problems found?

Yes

- Repair as necessary.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

No

- Replace and program the Totally Integrated Power Module in accordance with the Service Information.
- Perform the PCM Verification Test. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC**

U0001-CAN C BUS

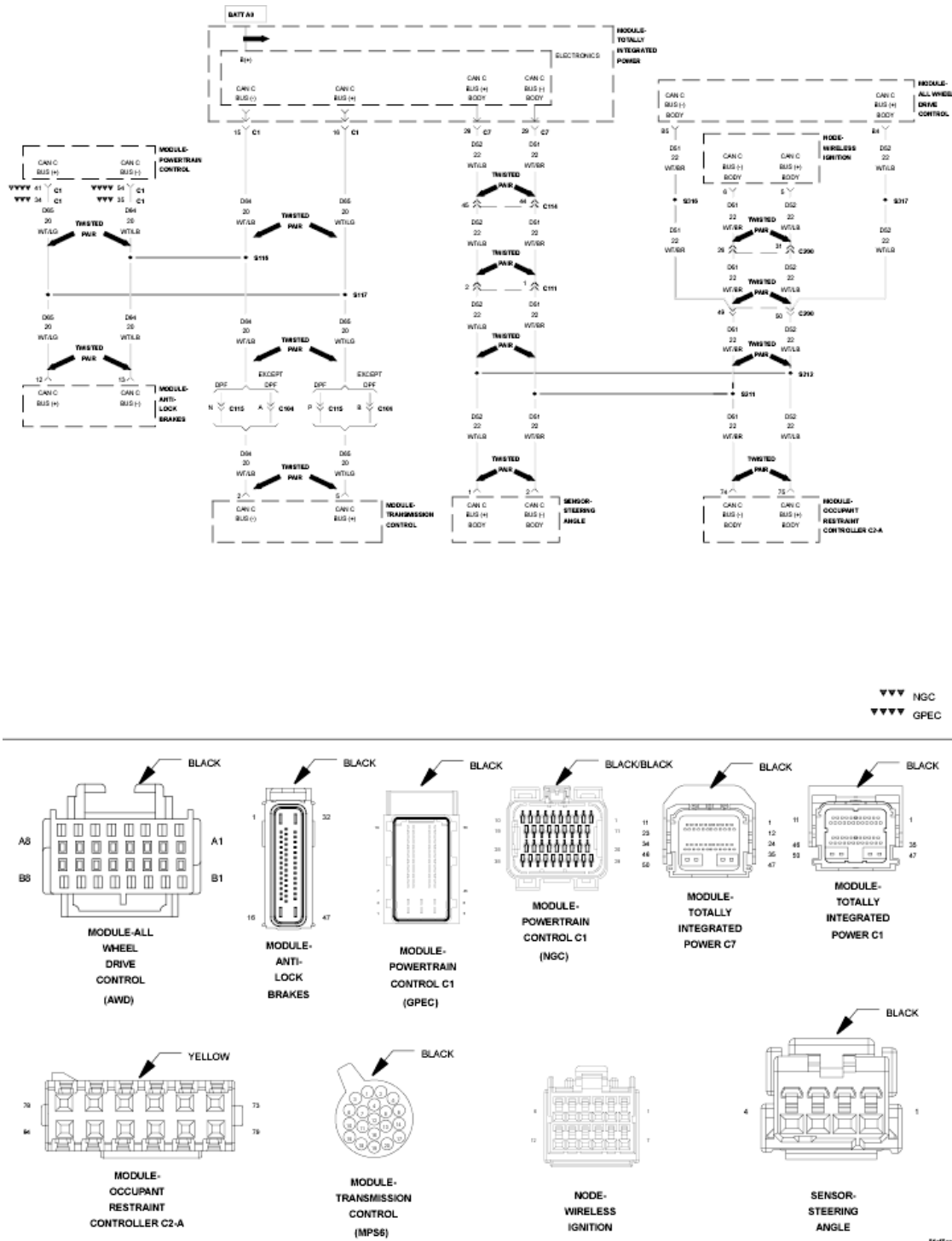


Fig. 33: TIPM & CAN C Modules - Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

- **When Monitored:**

With the ignition on.

• **Set Condition:**

The Totally Integrated Power Module (TIPM) detects a corrupt CAN C Bus message.

Possible Causes

(D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO GROUND
 (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO VOLTAGE
 (D52) CAN C BUS (+) CIRCUIT SHORTED TO (D51) CAN C BUS (-) CIRCUIT
 (D65) CAN C BUS (+) CIRCUIT SHORTED TO (D64) CAN C BUS (-) CIRCUIT
 ANTILOCK BRAKE MODULE
 POWERTRAIN CONTROL MODULE
 TRANSMISSION CONTROL MODULE
 STEERING ANGLE SENSOR
 WIRELESS IGNITION NODE
 OCCUPANT RESTRAINT CONTROLLER MODULE
 TOTALLY INTEGRATED POWER MODULE

DIAGNOSTIC TEST

1. TEST FOR INTERMITTENT CONDITION

1. Turn the ignition on.
2. With the scan tool, record and erase TIPM DTC's.
3. Cycle the ignition from on to off 3 times.
4. Turn the ignition on.
5. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 2.

No

- The conditions that caused this code to set are not present at this time. Using **Fig. 33** as a guide, inspect the wiring and connectors.

2. ANTILOCK BRAKE MODULE - INTERNAL SHORT

1. Turn the ignition off.
2. Disconnect the Antilock Brake Module harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTC's.

5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 3.

No

- Inspect the wiring and connectors for damage or shorted circuits in accordance with the service information.
- Perform the ABS VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure** .

3. POWERTRAIN CONTROL MODULE - INTERNAL SHORT

1. Turn the ignition off.
2. Disconnect the Powertrain Control Module C1 harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTC's.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 4.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Powertrain Control Module in accordance with the service information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC** .

4. TRANSMISSION CONTROL MODULE - INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Transmission Control Module harness connectors.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTC's.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 5.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Transmission Control Module in accordance with the service information.
- Perform the TCM VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Transmission Control (TCM) - Standard Procedure** .

5. STEERING ANGLE SENSOR - INTERNAL SHORT

1. Turn the ignition off.

NOTE: **If vehicle is not equipped with this module, answer yes to the question.**

2. Disconnect the Steering Angle Sensor harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTC's.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 6.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace the Steering Angle Sensor in accordance with the service information.

- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

6. WIRELESS IGNITION NODE- INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Wireless Control Module harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTC's.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 7.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace the Wireless Control Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. OCCUPANT RESTRAINT CONTROLLER MODULE - INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Occupant Restraint Controller Module harness connectors.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTC's.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTC's.

Does the scan tool display U0001-CAN C BUS as active?

Yes

- Go to Step 8.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace the Occupant Restraint Controller Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

8. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO VOLTAGE

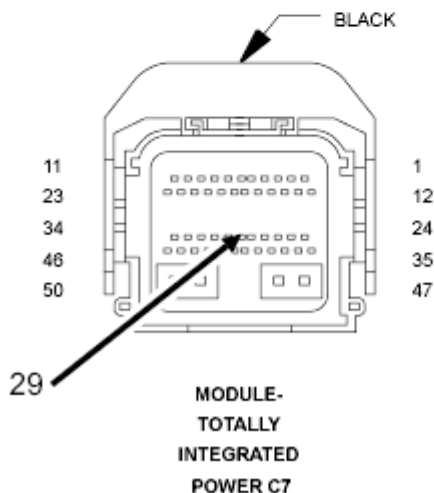
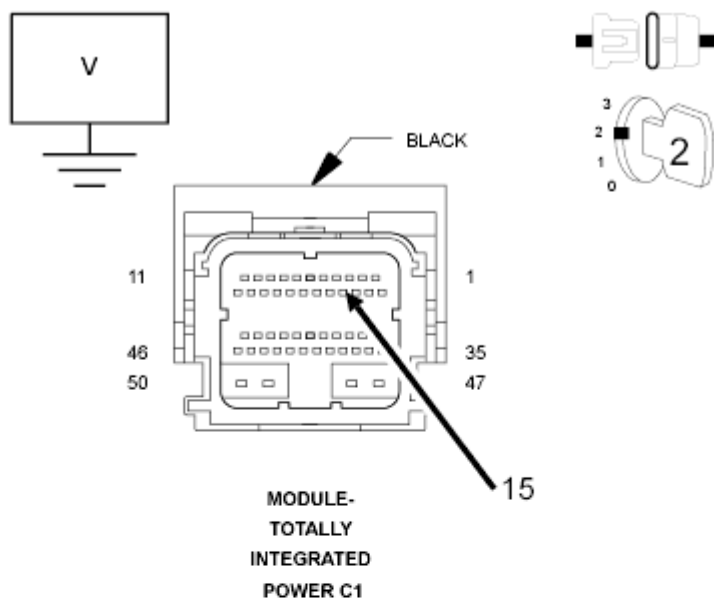


Fig. 34: Measuring Voltage Between CAN C Bus (-) Circuits & Ground At TIPM Harness Connectors**Courtesy of CHRYSLER LLC**

1. Turn the ignition off.
2. Disconnect the TIPM C7 and C1 harness connectors.
3. Turn the ignition on.
4. Measure the voltage between the (D51) CAN C Bus (-) circuit and ground at the TIPM C7 harness connector.
5. Measure the voltage between the (D64) CAN C Bus (-) circuit and ground at the TIPM C1 harness connector.

Is there any voltage present?

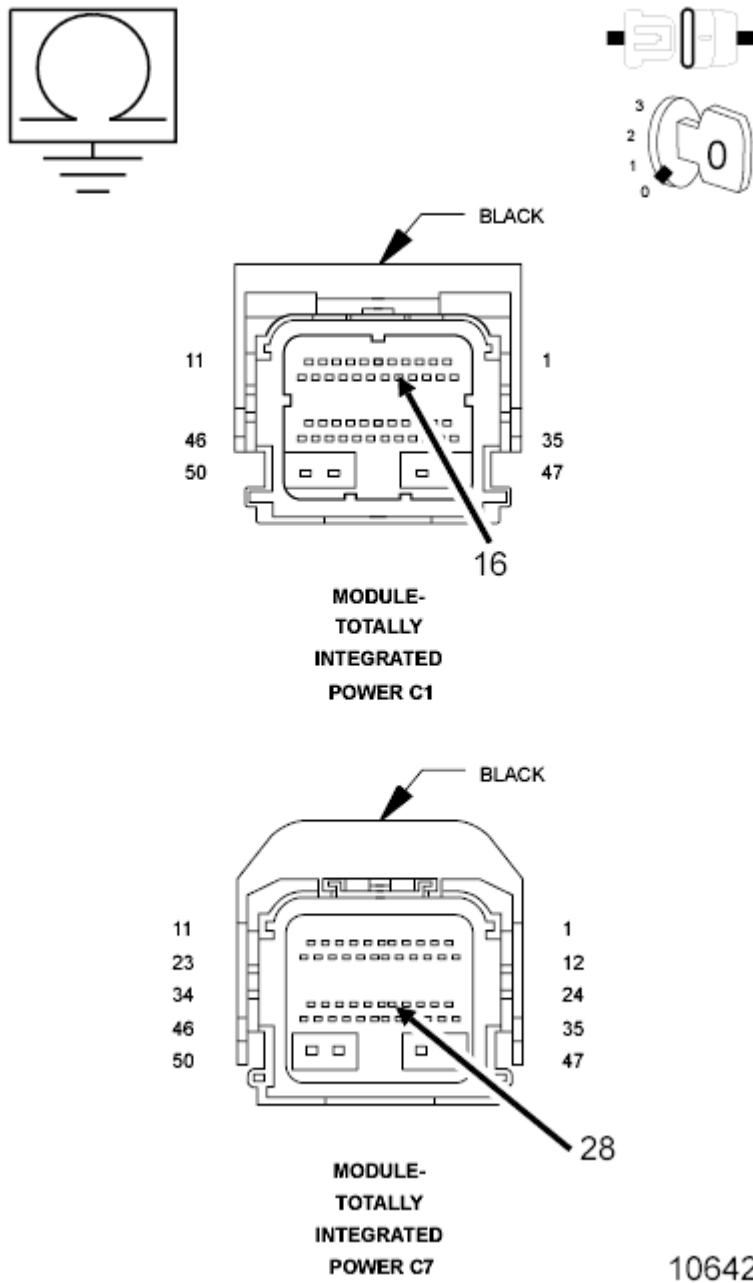
Yes

- Repair the (D51) or the (D64) CAN C Bus (-) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 9.

9. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO GROUND



106427

Fig. 35: Measuring Resistance Between Ground & CAN C Bus (+) Circuits
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D52) CAN C Bus (+) circuit.
3. Measure the resistance between ground and the (D65) CAN C Bus (+) circuit.

Is any resistance present?

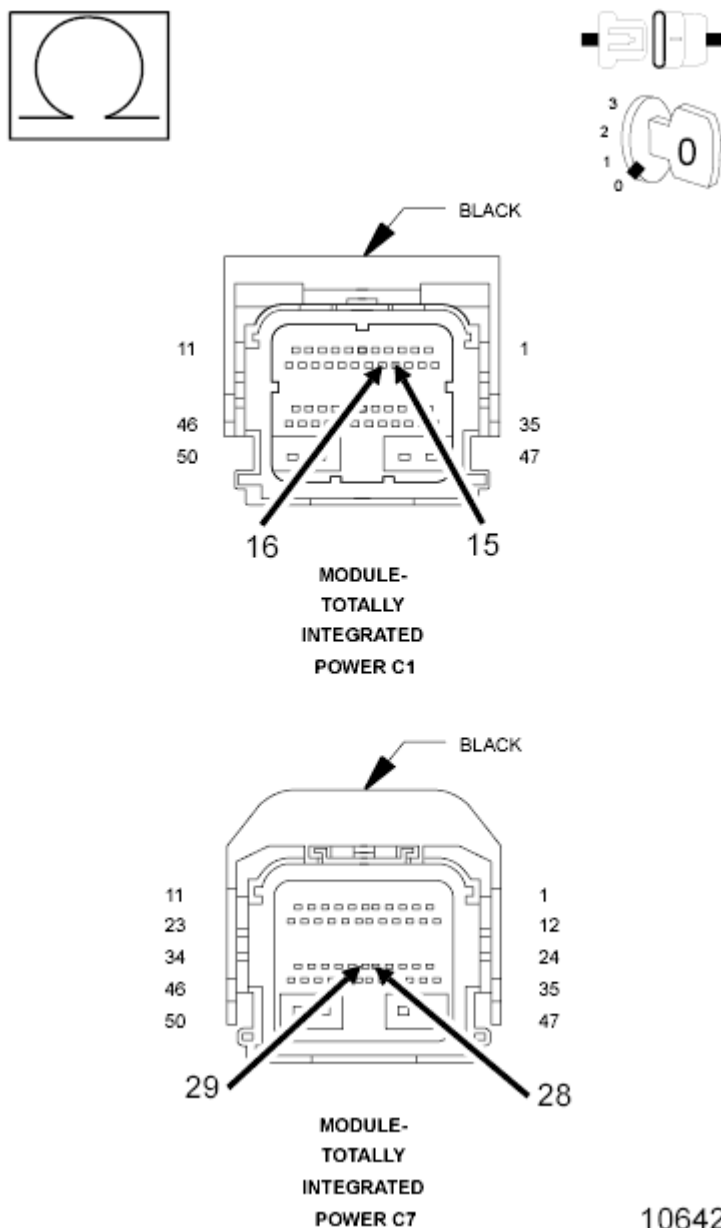
Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 10.

10. CAN C BUS (+) CIRCUIT SHORTED TO CAN C BUS (-) CIRCUIT



106429

Fig. 36: Measuring Resistance Between CAN C Bus (+) Circuits & CAN C Bus (-) Circuits
 Courtesy of CHRYSLER LLC

1. Measure the resistance between the (D52) CAN C Bus (+) circuit and the (D51) CAN C Bus (-) circuit.
2. Measure the resistance between the (D65) CAN C Bus (+) circuit and the (D64) CAN C Bus (-) circuit.

Is any resistance present?

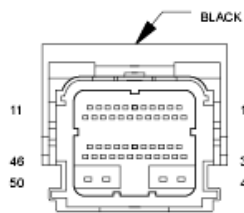
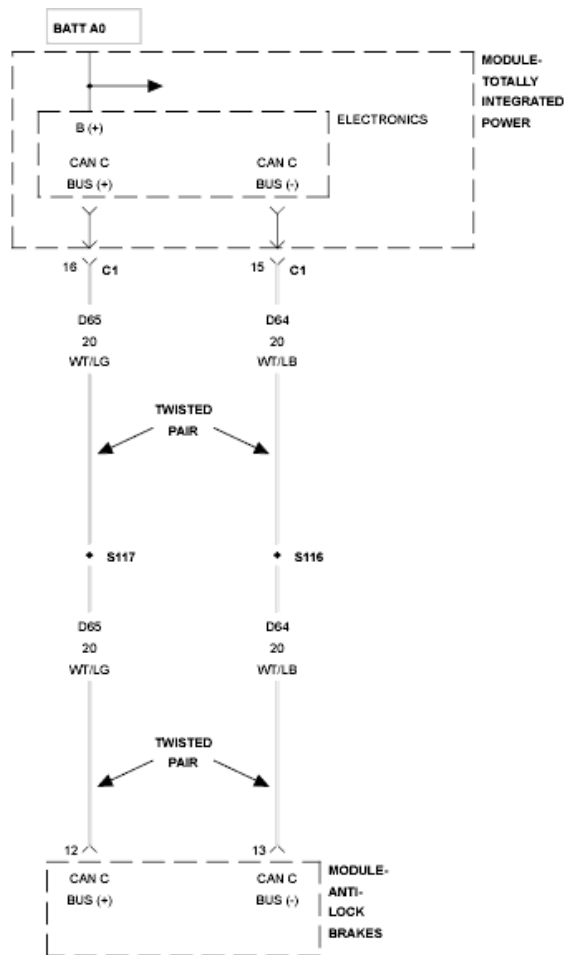
Yes

- Repair the CAN C Bus (+) circuit for a short to the CAN C Bus (-) circuit.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

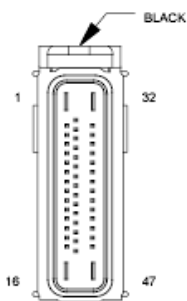
No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Totally Integrated Power Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0002-CAN C BUS OFF PERFORMANCE



MODULE-TOTALLY INTEGRATED POWER C1



MODULE-ANTI-LOCK BRAKES

Fig. 37: CAN C Bus - Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

• **Set Condition:**

The Totally Integrated Power Module (TIPM) detects a CAN C Bus Off Performance message.

Possible Causes

(D65) CAN C BUS (+) CIRCUIT SHORTED TO GROUND
 (D64) CAN C BUS (-) CIRCUIT SHORTED TO VOLTAGE
 (D65) CAN C BUS (+) CIRCUIT SHORTED TO (D64) CAN C BUS (-) CIRCUIT
 ANTI-LOCK BRAKE MODULE
 POWERTRAIN CONTROL MODULE
 TRANSMISSION CONTROL MODULE
 STEERING ANGLE SENSOR
 WIRELESS CONTROL MODULE
 OCCUPANT RESTRAINT CONTROLLER MODULE
 TOTALLY INTEGRATED POWER MODULE

DIAGNOSTIC TEST

1. TEST FOR INTERMITTENT CONDITION

1. Turn the ignition on.
2. With the scan tool, record and erase TIPM DTCs.
3. Cycle the ignition from on to off 3 times.
4. Turn the ignition on.
5. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCE as active?

Yes

- Go to Step 2.

No

- Perform the INTERMITTENT CONDITION diagnostic procedure. Refer to **DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure** .

2. ANTILOCK BRAKE MODULE - INTERNAL SHORT

1. Turn the ignition off.
2. Disconnect the Anti-Lock Brake Module harness connector.
3. Turn the ignition on.

4. With the scan tool, record and erase TIPM DTCs.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCE as active?

Yes

- Go to Step 3.

No

- Inspect the wiring and connectors for damage or shorted circuits in accordance with the service information.
- Perform the INTERMITTENT CONDITION diagnostic procedure. Refer to **DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure** .

3. POWERTRAIN CONTROL MODULE - INTERNAL SHORT

1. Turn the ignition off.
2. Disconnect the Powertrain Control Module C1 harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTCs.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCE as active?

Yes

- Go to Step 4.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Powertrain Control Module in accordance with the service information.
- Perform POWERTRAIN VERIFICATION TEST. Refer to **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC** .

4. TRANSMISSION CONTROL MODULE - INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Transmission Control Module harness connectors.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTCs.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCE as active?

Yes

- Go to Step 5.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Transmission Control Module in accordance with the service information.
- Perform the TCM VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Transmission Control (TCM) - Standard Procedure** .

5. STEERING ANGLE SENSOR - INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Steering Angle Sensor harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTCs.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCES as active?

Yes

- Go to Step 6.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace the Steering Angle Sensor in accordance with the service information.
- Perform ABS VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Antilock Brake (ABS) - Standard Procedure**.

6. WIRELESS CONTROL MODULE - INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Wireless Control Module harness connector.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTCs.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCE as active?

Yes

- Go to Step 7.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace the Wireless Control Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

7. OCCUPANT RESTRAINT CONTROLLER MODULE - INTERNAL SHORT

1. Turn the ignition off.

NOTE: If vehicle is not equipped with this module, answer yes to the question.

2. Disconnect the Occupant Restraint Controller Module harness connectors.
3. Turn the ignition on.
4. With the scan tool, record and erase TIPM DTCs.
5. Cycle the ignition from on to off 3 times.
6. Turn the ignition on.
7. With the scan tool, read active TIPM DTCs.

Does the scan tool display U0002-CAN C BUS OFF PERFORMANCE as active?

Yes

- Go to Step 8.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace the Occupant Restraint Controller Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

8. (D64) CAN C BUS (-) CIRCUIT SHORTED TO VOLTAGE

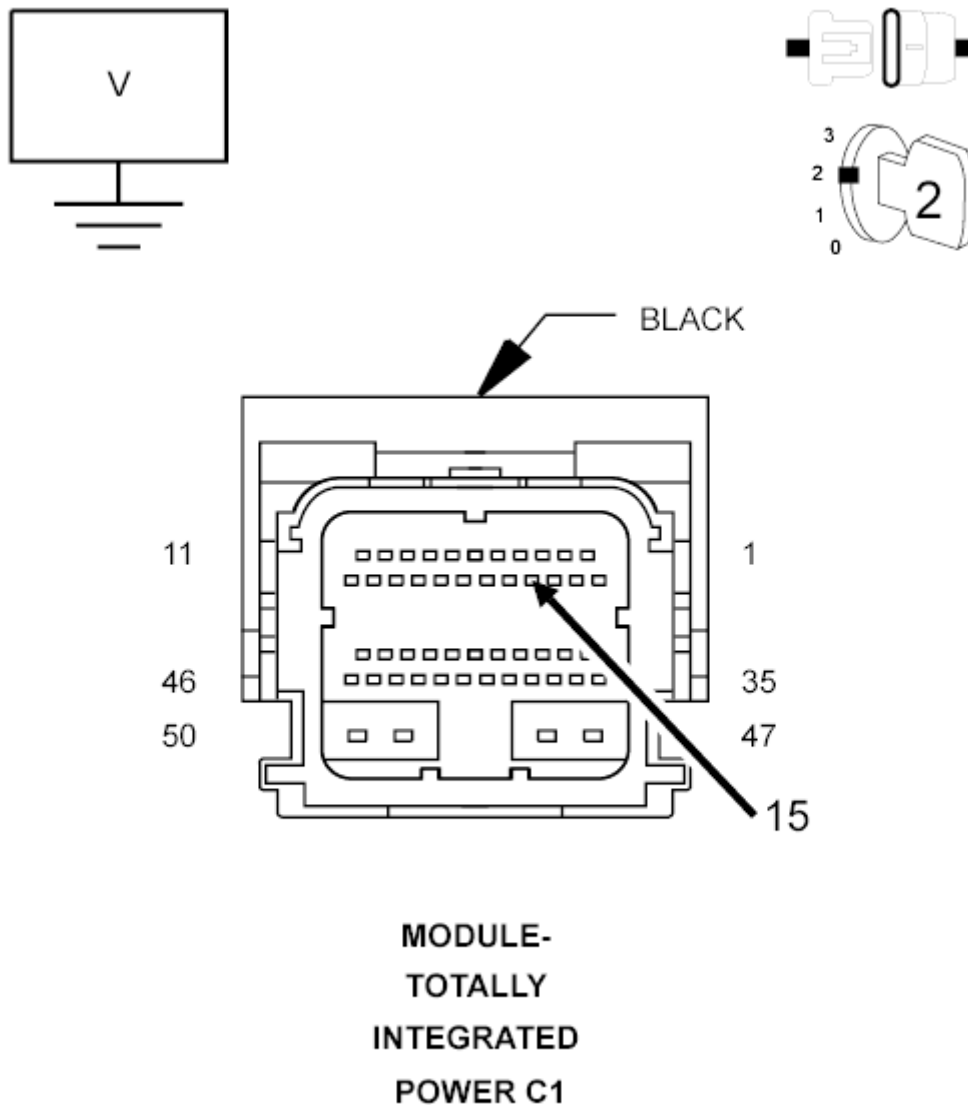


Fig. 38: Measuring Voltage Between CAN C Bus (-) Circuit And Ground At TIPM C1 Harness Connector

Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the TIPM C1 harness connector.
3. Turn the ignition on.
4. Measure the voltage between the (D64) CAN C Bus (-) circuit and ground at the TIPM C1 harness connector.

Is there any voltage present?

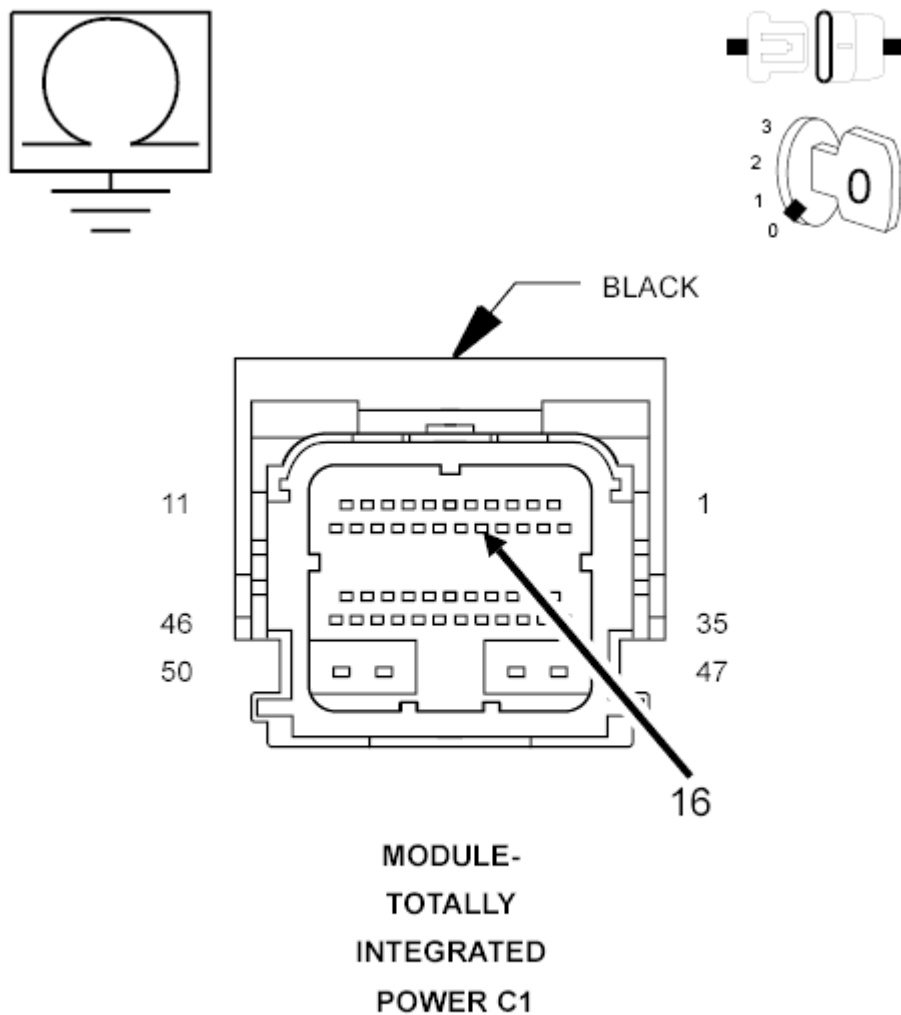
Yes

- Repair the (D64) CAN C Bus (-) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D65) CAN C BUS (+) CIRCUIT SHORTED TO GROUND



102720

Fig. 39: Measuring Resistance Between Ground & CAN C Bus (+) Circuit
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.

2. Measure the resistance between ground and the (D65) CAN C Bus (+) circuit.

Is any resistance present?

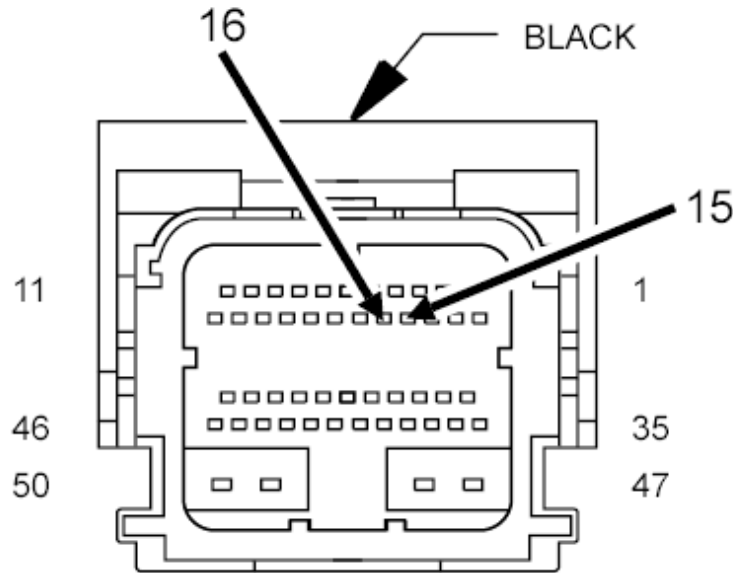
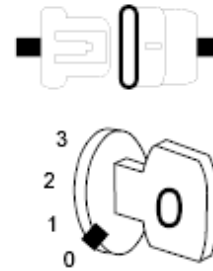
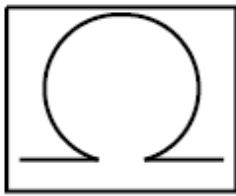
Yes

- Repair the (D65) CAN C Bus (+) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 10.

10. **(D65) CAN C BUS (+) CIRCUIT SHORTED TO (D64) CAN C BUS (-) CIRCUIT**



MODULE-
TOTALLY
INTEGRATED
POWER C1

102722

Fig. 40: Measuring Resistance Between CAN C Bus (+) Circuit & CAN C Bus (-) Circuit
Courtesy of CHRYSLER LLC

1. Measure the resistance between the (D65) CAN C Bus (+) circuit and the (D64) CAN C Bus (-) circuit.

Is any resistance present?

Yes

- Repair the (D65) CAN C Bus (+) circuit for a short to the (D64) CAN C Bus (-) circuit.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Totally Integrated Power Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

U0010-CAN INTERIOR BUS

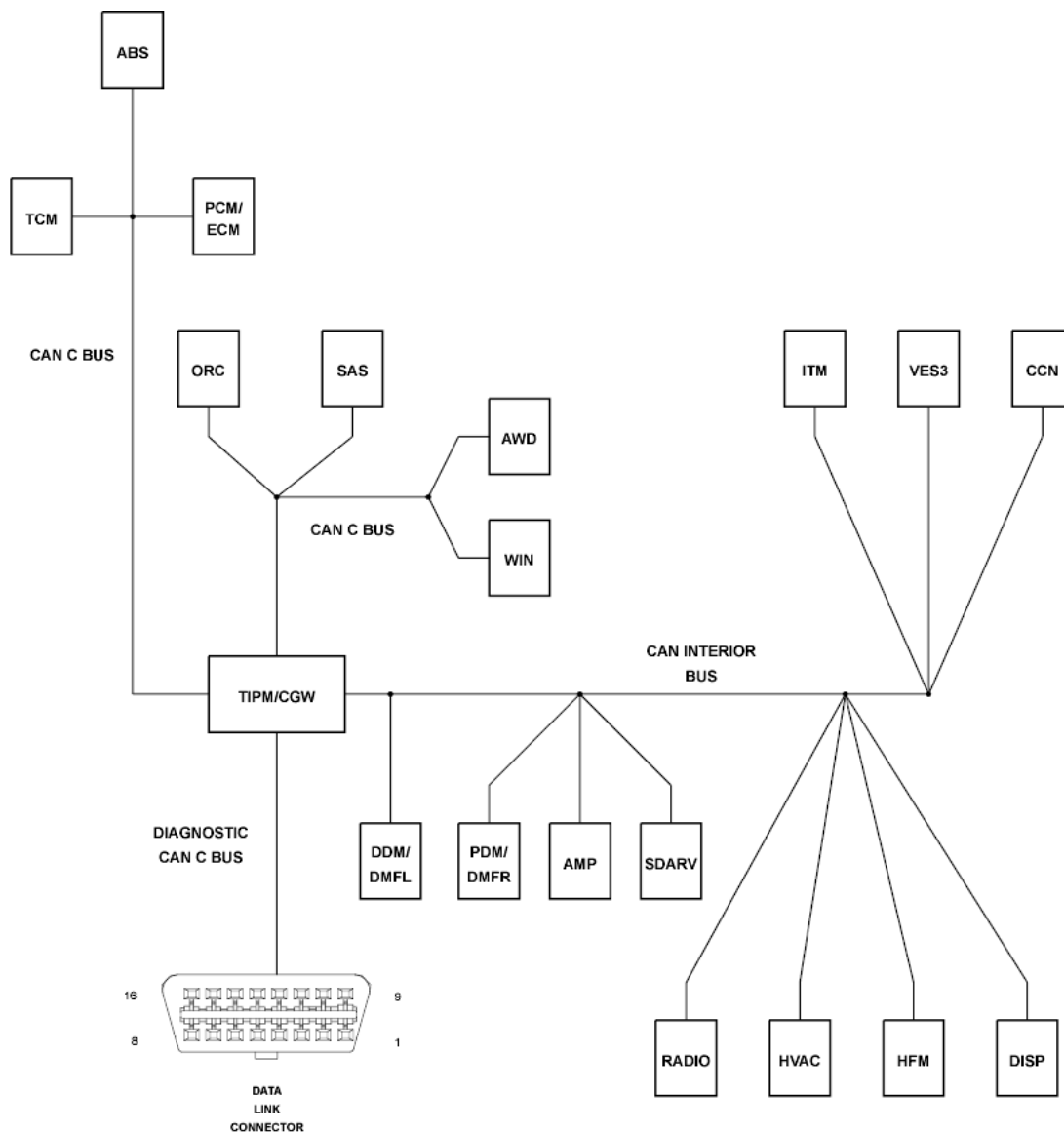


Fig. 41: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

- **When Monitored:**

With the ignition on.

- **Set Condition:**

The TIPM detects a short to ground on the CAN Interior Bus (125K) (+) circuit or a short to voltage on the CAN Interior Bus (125K) (-) circuit.

Possible Causes
(D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO GROUND (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT SHORTED TO VOLTAGE ANY CAN INTERIOR BUS MODULE TOTALLY INTEGRATED POWER MODULE

DIAGNOSTIC TEST

1. TEST FOR INTERMITTENT CONDITION

1. Turn the ignition on.
2. With the scan tool, record and erase TIPM DTC's.
3. Cycle the ignition from on to off 3 times.
4. Turn the ignition on.
5. With the scan tool, read active TIPM DTC's.

Does the scan tool display this DTC as active?

Yes

- Go to Step 2.

No

- The conditions that caused this code to set are not present at this time. Using **Fig. 41** as a guide, inspect the wiring and connectors.

2. ANY CAN INTERIOR BUS (125K) MODULE- INTERNAL SHORT

NOTE: When performing this step, turn the ignition off (wait one minute) before disconnecting any module. When the module is disconnected turn the ignition on.

NOTE: This step is to determine if the fault is internal within a module.

1. While monitoring the scan tool, disconnect each CAN Interior Bus (125K) module (except for the TIPM itself), one at a time.
2. Check for this DTC to become active after disconnecting each CAN Interior Bus (125K) module the vehicle is equipped with.

NOTE: If the DTC becomes stored when a particular module is disconnected, that module is causing the DTC to set.

With all the CAN Interior Bus modules disconnected does the scan tool display this DTC as active?

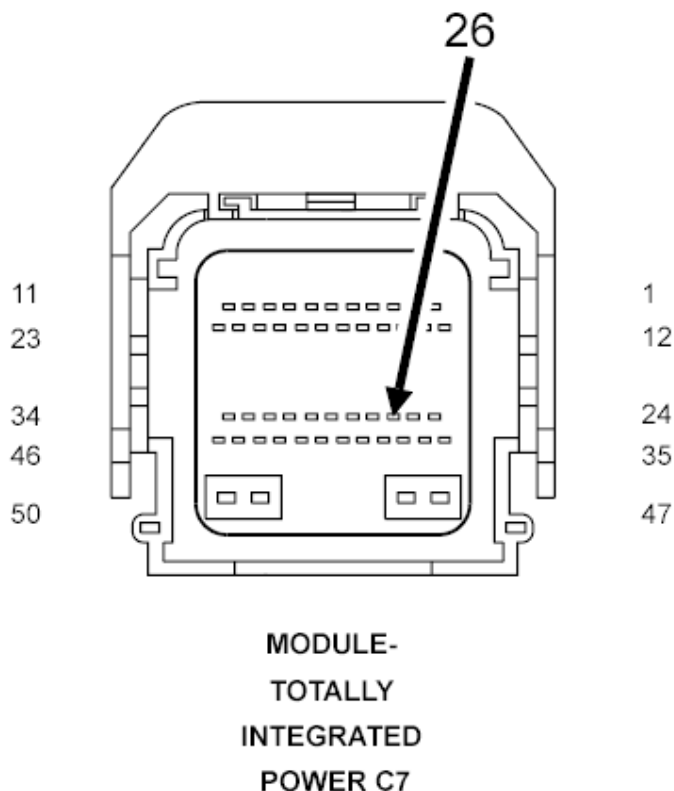
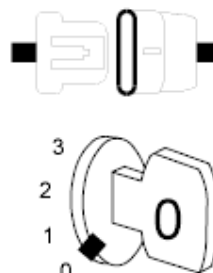
Yes

- Go to Step 3.

No

- Replace the module that when disconnected caused this DTC to become stored in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

3. (D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO GROUND



106435

Fig. 42: Measuring Resistance Between Ground & CAN Interior Bus (+) Circuit At TIPM C7 Harness Connector

Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D265) CAN Interior Bus (125K) (+) circuit at the TIPM C7 harness connector.

Is any resistance present?

Yes

- Repair the (D265) CAN Interior Bus (125K) (+) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE**,

Totally Integrated Power (TIPM) - Standard Procedure .

No

- Go to Step 4.

4. (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT SHORTED TO VOLTAGE

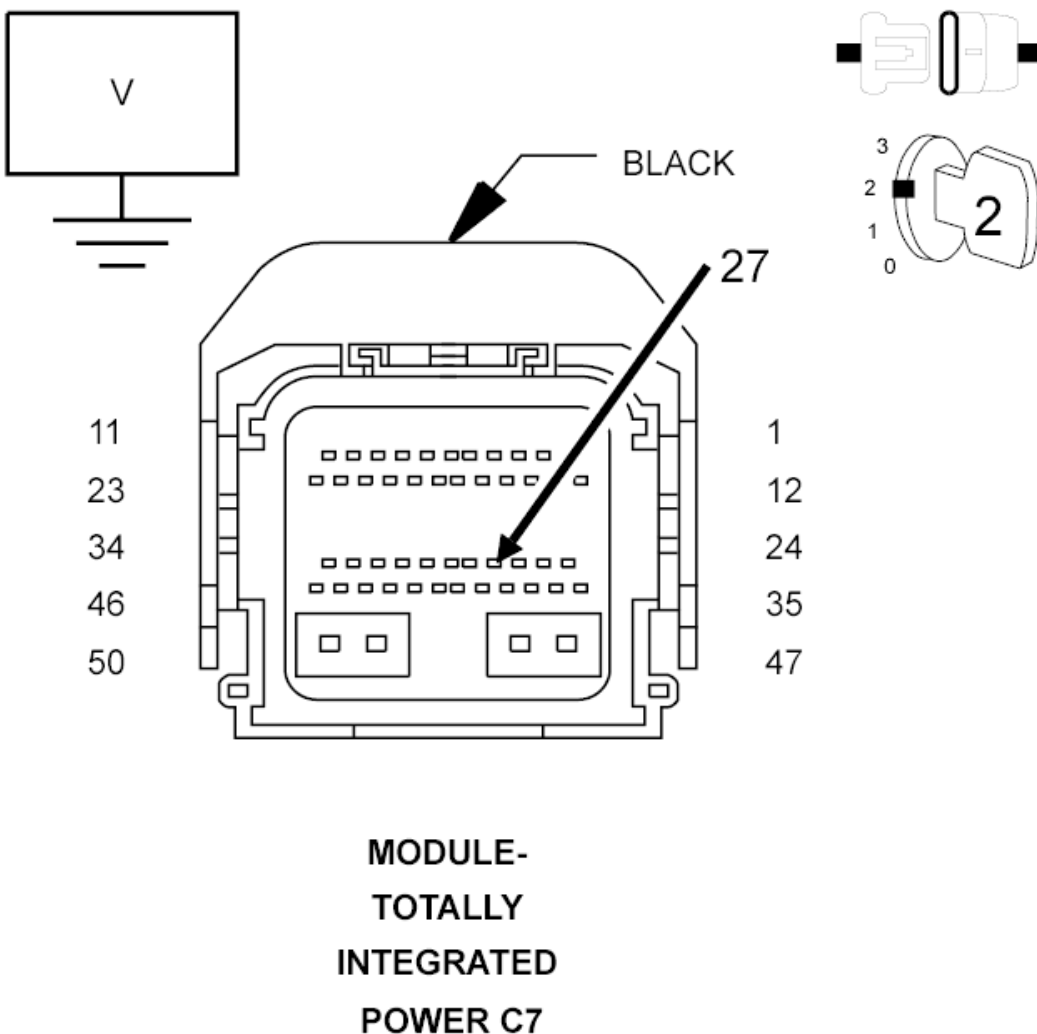


Fig. 43: Measuring Voltage At CAN Interior Bus (-) Circuit At TIPM C7 Harness Connector
 Courtesy of CHRYSLER LLC

1. Turn the ignition on.
2. Measure the voltage at the (D264) CAN Interior Bus (125K) (-) circuit at the TIPM C7 harness connector.

Is the voltage above 6 volts?

Yes

- Repair the (D264) CAN Interior Bus (125K) (-) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Inspect the wiring and connectors for damage or shorted circuits. If OK, replace and program the Totally Integrated Power Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0011-CAN INTERIOR BUS OFF PERFORMANCE

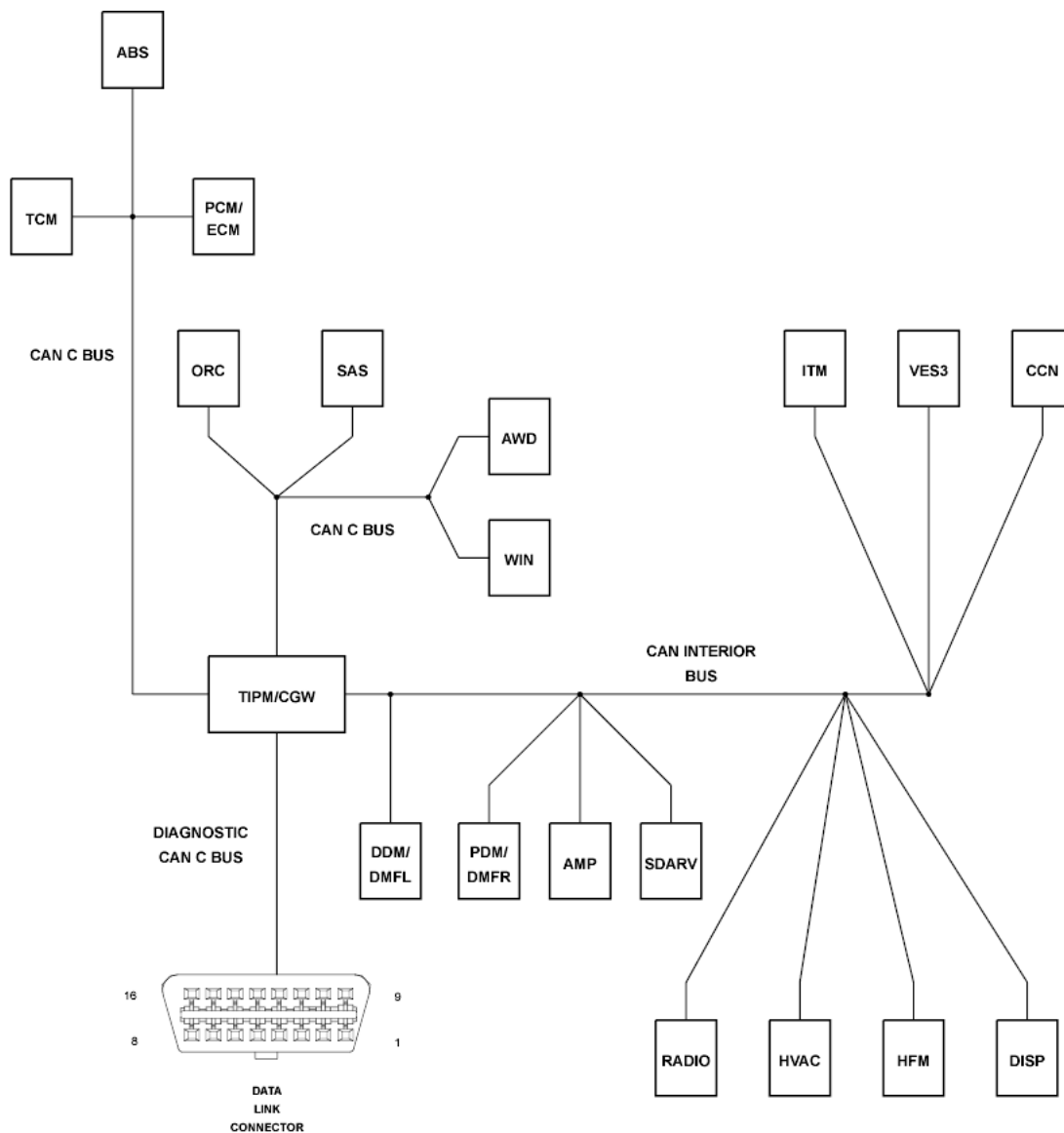


Fig. 44: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

- **When Monitored:**

With the ignition on.

- **Set Condition:**

A module detects the CAN Interior Bus circuits shorted to ground, shorted together or shorted to voltage.

Possible Causes
(D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO GROUND
(D264) CAN INTERIOR BUS (125K) (-) CIRCUIT SHORTED TO GROUND
(D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT
(D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO VOLTAGE
(D264) CAN INTERIOR BUS (125K) (-) CIRCUIT SHORTED TO VOLTAGE
ANY CAN INTERIOR BUS MODULE
TOTALLY INTEGRATED POWER MODULE

DIAGNOSTIC TEST

1. TEST FOR INTERMITTENT CONDITION

1. Turn the ignition on.
2. With the scan tool, record and erase DTC's.
3. Cycle the ignition from on to off 3 times.
4. Turn the ignition on.
5. With the scan tool, read active DTC's.

Does the scan tool display this DTC as active?

Yes

- Go to Step 2.

No

- The conditions that caused this code to set are not present at this time. Using **Fig. 44** as a guide, inspect the wiring and connectors.

2. ANY CAN INTERIOR BUS (125K) MODULE- INTERNAL SHORT

NOTE: When performing this step, turn the ignition off (wait one minute) before disconnecting any module. When the module is disconnected turn the ignition on.

NOTE: This step is to determine if the fault is internal within a module.

1. While monitoring the scan tool, disconnect each CAN Interior Bus (125K) module (except the TIPM itself), one at a time.
2. Check for this DTC to become active after disconnecting each CAN Interior Bus (125K) module the vehicle is equipped with.

NOTE: If the DTC becomes stored when a particular module is disconnected, that module is causing the DTC to set.

With all the CAN Interior Bus modules disconnected does the scan tool display this DTC as active?

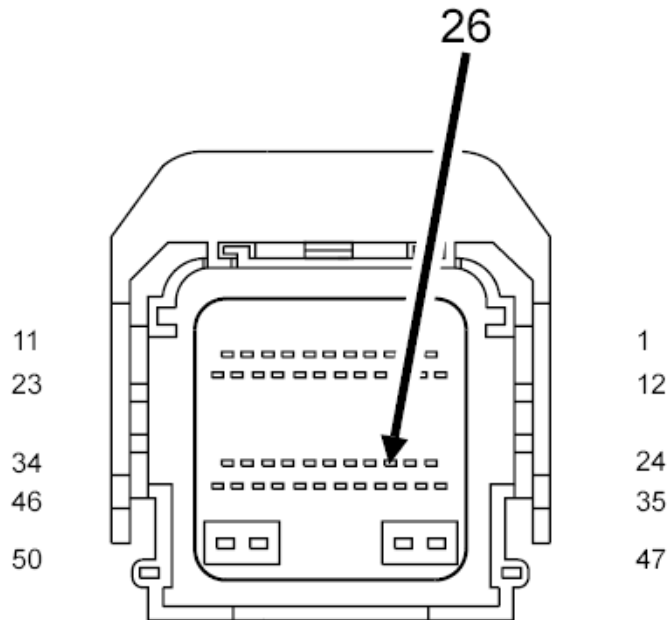
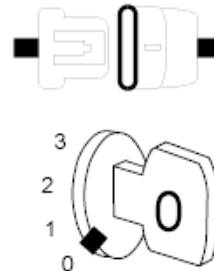
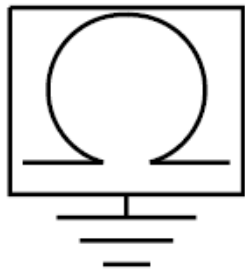
Yes

- Go to Step 3.

No

- Replace the module that when disconnected caused this DTC to become stored in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

3. (D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO GROUND



MODULE-
TOTALLY
INTEGRATED
POWER C7

106441

Fig. 45: Measuring Resistance Between Ground & CAN Interior Bus (+) Circuit At TIPM C7 Harness Connector

Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the TIPM C7 Harness connector.
3. Measure the resistance between ground and the (D265) CAN Interior Bus (125K) (+) circuit at the TIPM C7 harness connector.

Is the resistance below 10,000.0 Ohms?

Yes

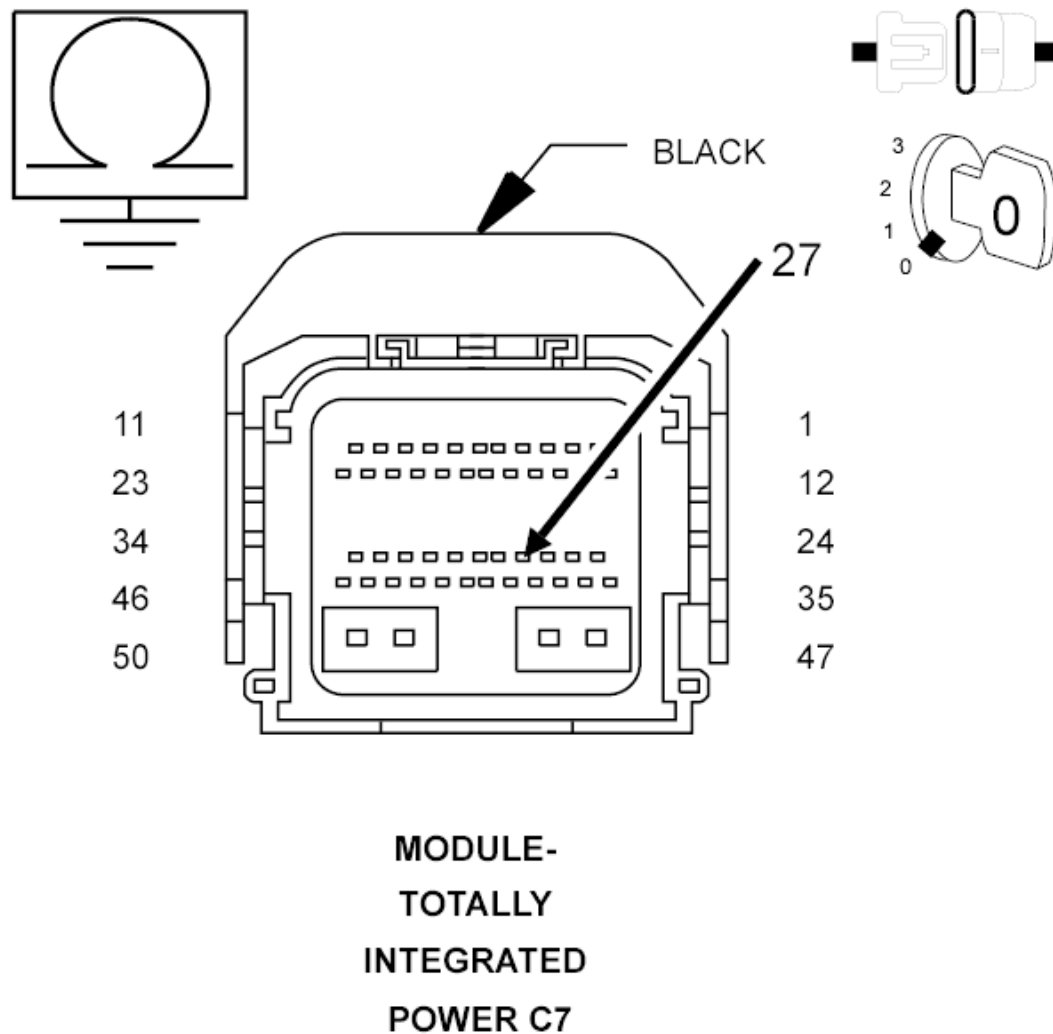
- Repair the (D265) CAN Interior Bus (125K) (+) circuit for a short to ground.

- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 4.

4. (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT SHORTED TO GROUND



106443

Fig. 46: Measuring Resistance Between Ground & CAN Interior Bus(-) Circuit
 Courtesy of CHRYSLER LLC

1. Measure the resistance between ground and the (D264) CAN Interior Bus (125K) (-) circuit at the TIPM C7 harness connector.

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Is the resistance below 10,000.0 Ohms?

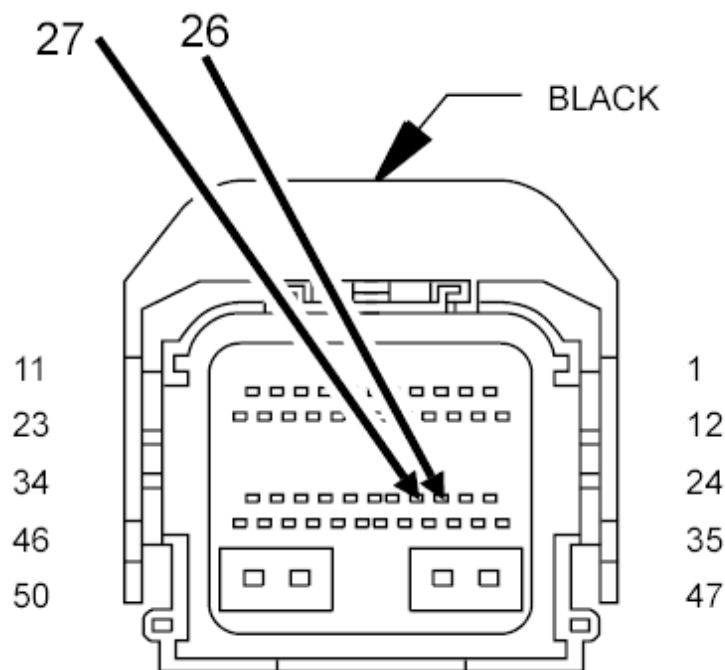
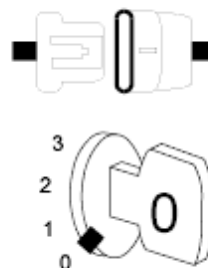
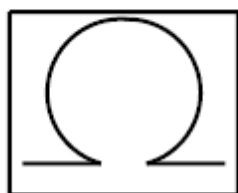
Yes

- Repair the (D264) CAN Interior Bus (125K) (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 5.

5. **(D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO THE (D254) CAN INTERIOR BUS (-) CIRCUIT**



MODULE-
TOTALLY
INTEGRATED
POWER C7

106445

Fig. 47: Measuring Resistance Between CAN Interior Bus (+) Circuit & CAN Interior Bus (-) Circuit At TIPM C7 Harness Connector
Courtesy of CHRYSLER LLC

1. Measure the resistance between the (D265) CAN Interior Bus (125K) (+) circuit and the (D254) CAN Interior Bus (125) (-) circuit at the TIPM C7 harness connector.

Is the resistance below 10,000.0 Ohms?

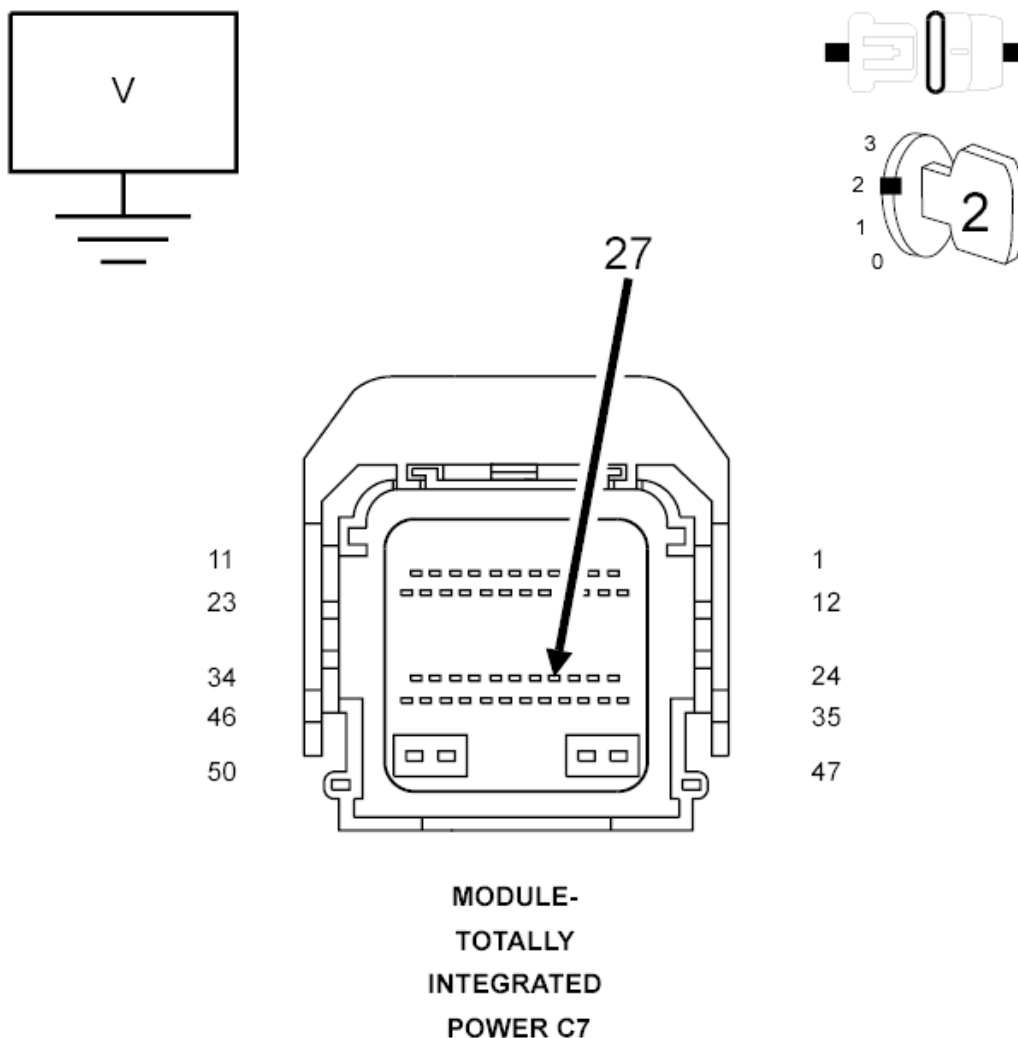
Yes

- Repair the (D265) CAN Interior Bus (125K) (+) circuit for a short to the (D264) CAN Interior Bus (125K) (-) circuit.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 6.

6. (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT SHORTED TO VOLTAGE



106447

Fig. 48: Measuring Voltage Between Ground & CAN Interior Bus (-) Circuit At TIPM C7 Harness Connector

Courtesy of CHRYSLER LLC

2009 Dodge Journey R/T

2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

1. Turn the ignition on.
2. Measure the voltage between ground and the (D264) CAN Interior Bus (125K) (-) circuit at the TIPM C7 harness connector.

Is the voltage above 0.02 volts?

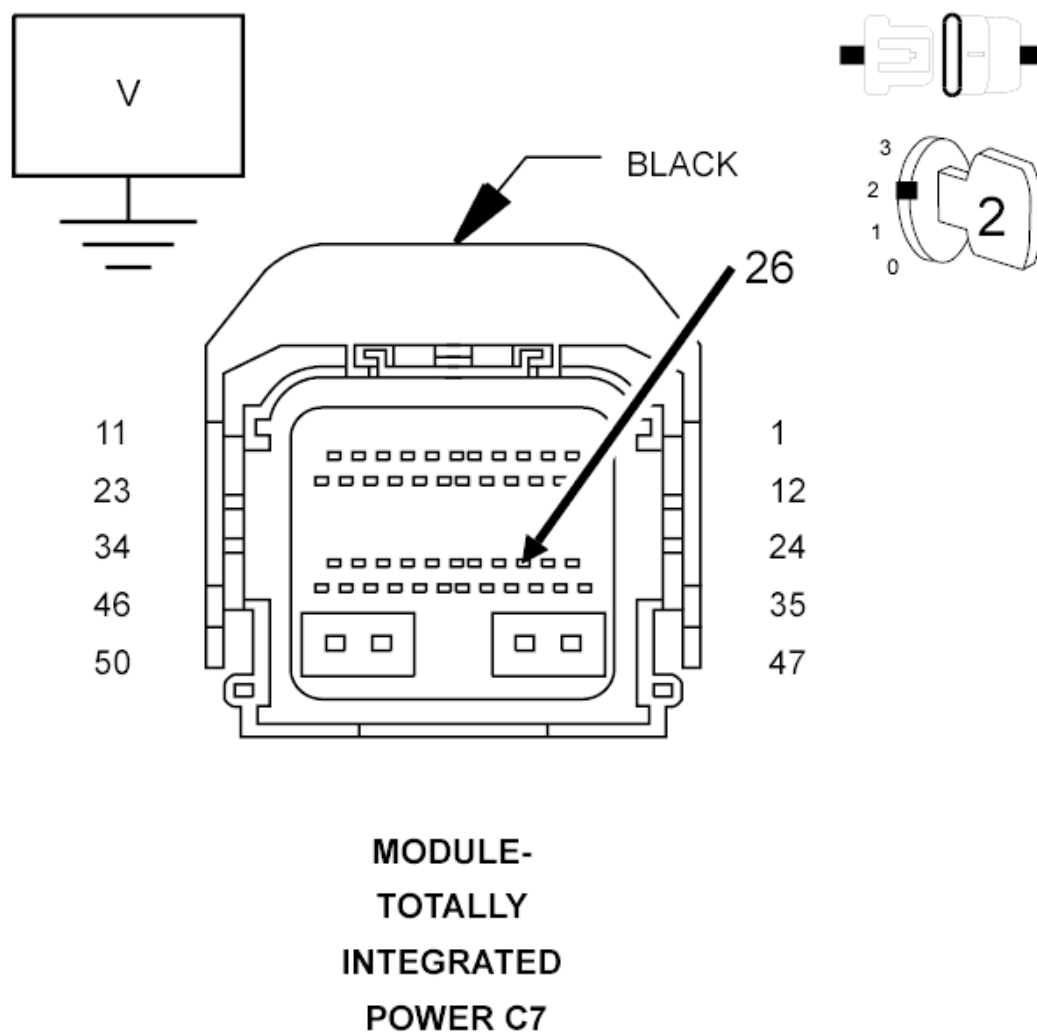
Yes

- Repair the (D264) CAN Interior Bus (125K) (-) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 7.

7. (D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO VOLTAGE



106449

Fig. 49: Measuring Voltage Between Ground & CAN Interior Bus (+) Circuit At TIPM C7 Harness Connector

Courtesy of CHRYSLER LLC

1. Measure the voltage between ground and the (D265) CAN Interior Bus (125K) (+) circuit at the TIPM C7 harness connector.

Is the voltage above 0.02 volts?

Yes

- Repair the (D264) CAN Interior Bus (125K) (-) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Inspect the wiring and all module connectors for damage or shorted pins. If OK, replace and program the Totally Integrated Power Module in accordance with service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0100-LOST COMMUNICATION WITH ECM/PCM

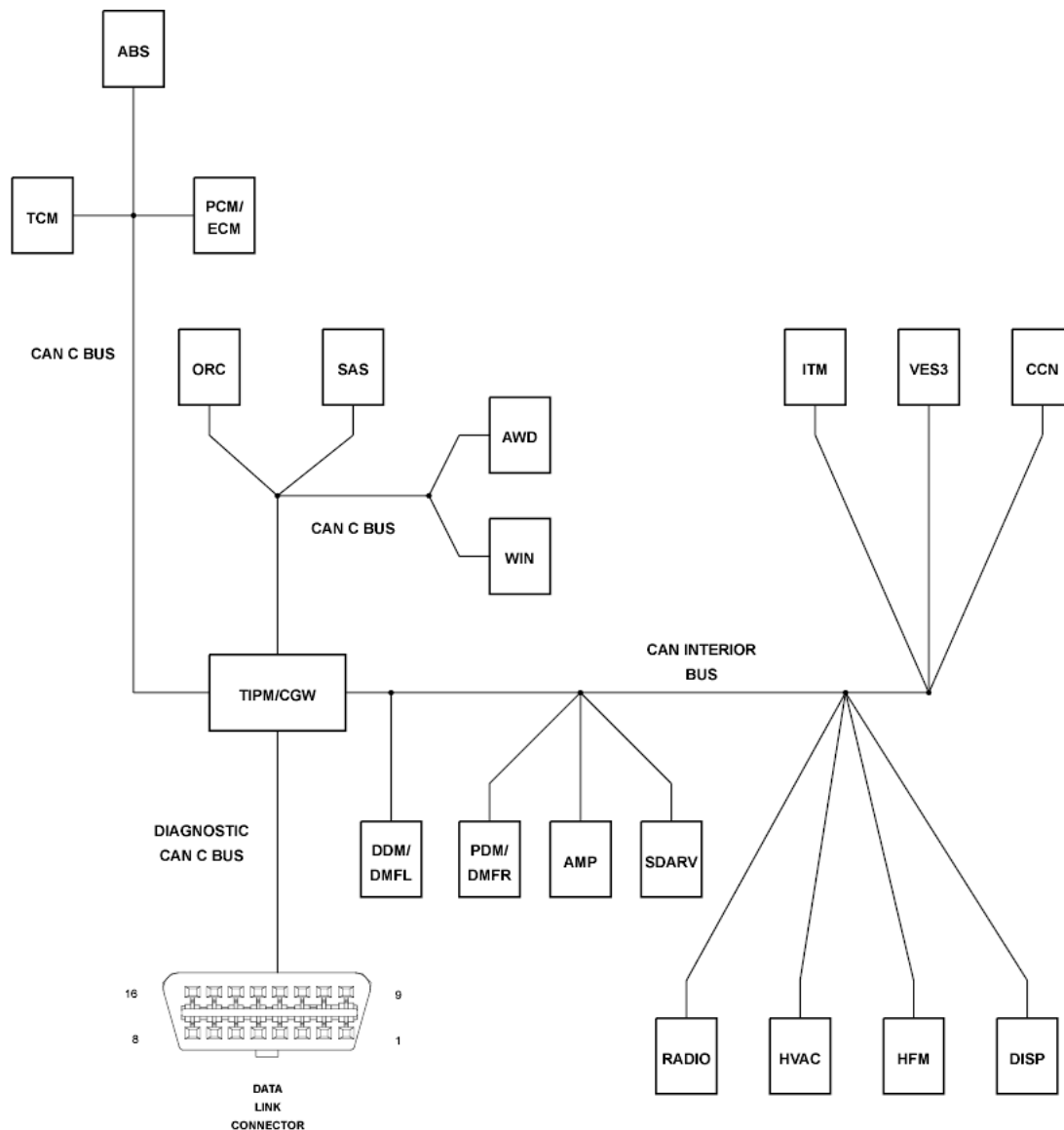


Fig. 50: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

Ignition Off Draw (IOD) fused installed.

Totally Integrated Power Module (TIPM) is configured correctly.

- **Set Condition:**

Bus messages not received from the Engine Control Module/Powertrain Control Module (ECM/PCM) for approximately two to five seconds.

Possible Causes
(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE
(D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
ECM/PCM POWER AND GROUND
ECM/PCM
MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Make sure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the Stored Lost Communication DTCs diagnostic procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Refer to the appropriate Diagnostic Information, and perform the appropriate diagnostic procedure.

No

- Go to Step 3.

3. VERIFY THAT THE ECM/PCM IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the ECM/PCM is active on the bus.

Is the ECM/PCM active on the bus?

Yes

- Go to Step 4.

No

- Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** and perform the NO RESPONSE FROM ECM / NO RESPONSE FROM PCM diagnostic procedure.

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the ECM/PCM?

Yes

- Replace/update the Engine Control Module/Powertrain Control Module in accordance with the service information.
- Perform the appropriate POWERTRAIN VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Engine Control (ECM) - Standard Procedure** for Diesel engine, or **PCM VERIFICATION TEST, CHECKING FOR AN INTERMITTENT DTC, PCM/TCM PROGRAMMING & PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE - NGC** for Gas engine .

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the ECM/PCM.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate verification test for the module being replaced. If there is no verification test for the associated module perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 50** as a guide, inspect the wiring for chafed, pierced, pinched and partially broken wires and the wiring harness connectors for broken, bent, pushed out and corroded terminals.
- Perform the appropriate verification test for the module being replaced. If there is no verification test for the associated module perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

2009 Dodge Journey R/T

2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate verification test for the module being replaced. If there is no verification test for the associated module perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

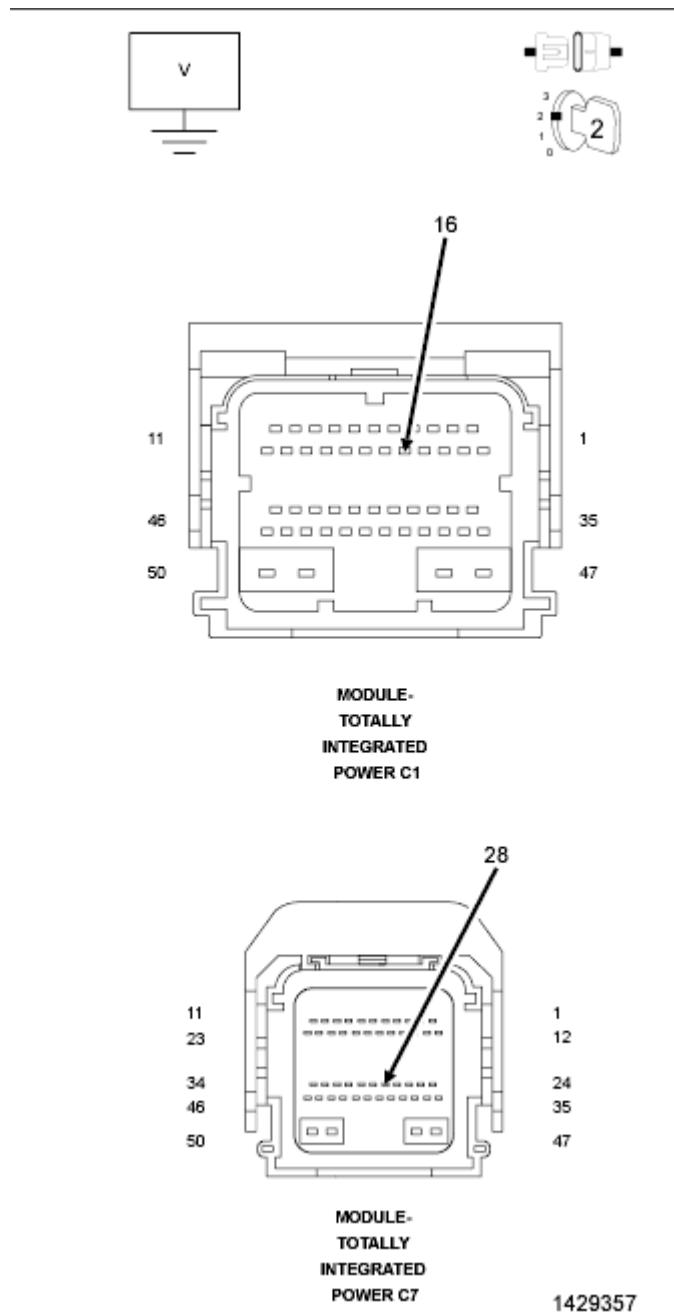


Fig. 51: Measuring Voltage Between CAN C Bus (+) Circuits & Ground
 Courtesy of CHRYSLER LLC

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

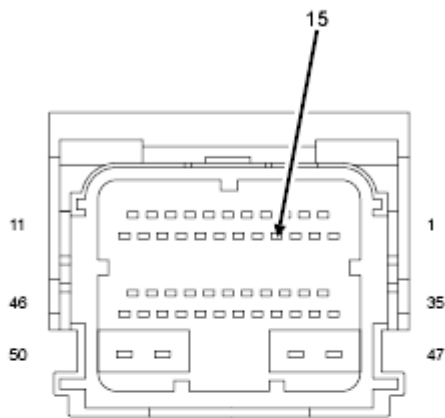
Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

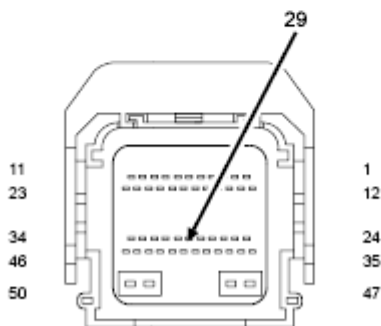
No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND



MODULE-
TOTALLY
INTEGRATED
POWER C1



MODULE-
TOTALLY
INTEGRATED
POWER C7

1429404

Fig. 52: Measuring Resistance Between Ground & CAN C Bus (-) Circuits
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate verification test for the module being replaced. If there is no verification test for the associated module perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0101-LOST COMMUNICATION WITH TCM

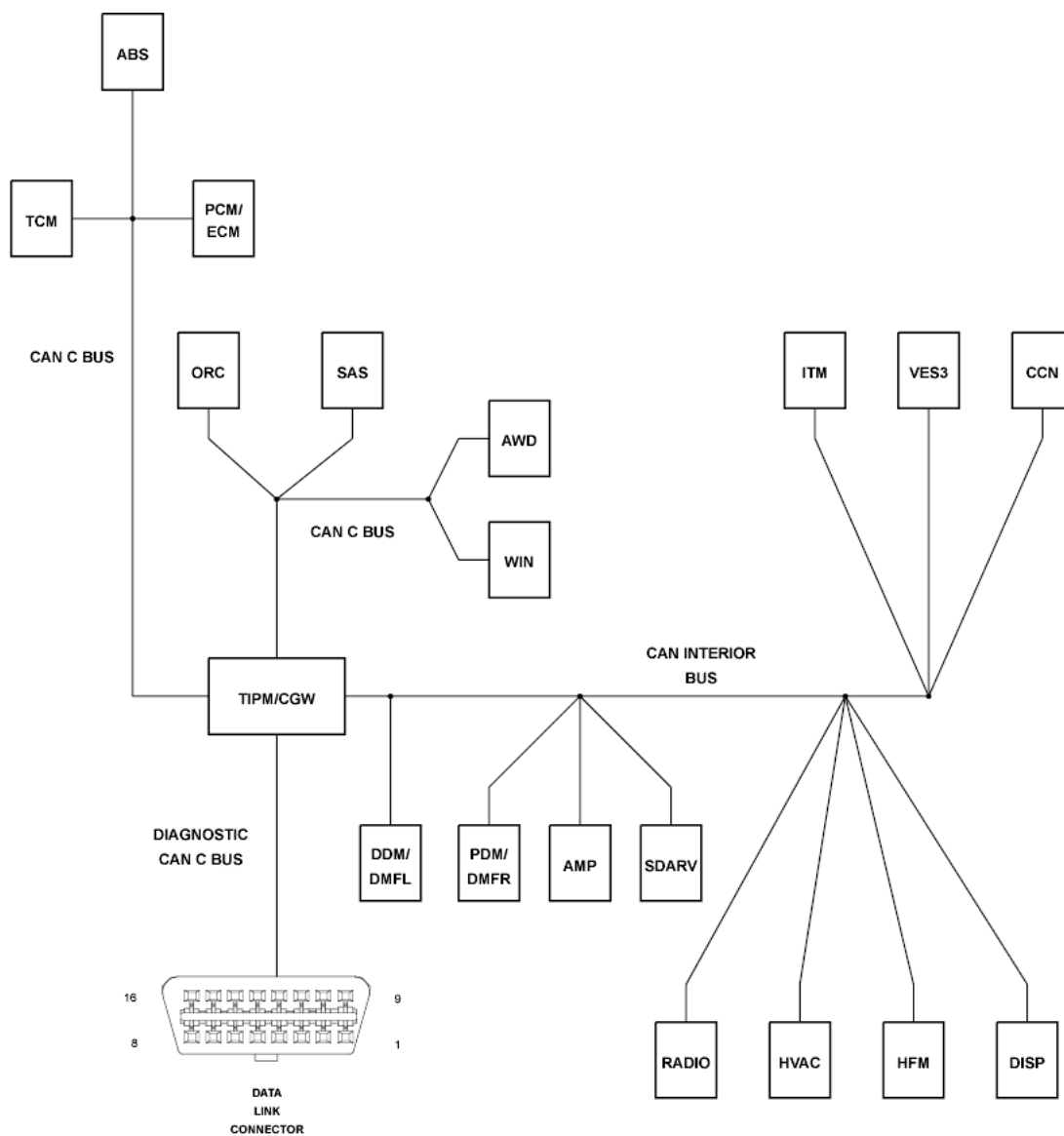


Fig. 53: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

• **Set Condition:**

Bus messages not received from the Transmission Control Module (TCM) for approximately 2 to 5 seconds.

Possible Causes

(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE
(D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
TCM POWER AND GROUND
TCM
MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE TCM IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the TCM is active on the bus.

Is the TCM active on the bus?

Yes

- Go to Step 4.

No

- Perform the NO RESPONSE FROM TCM test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the TCM?

Yes

- Replace/update the Transmission Control Module in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the TCM.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 53** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the appropriate VERIFICATION TEST.

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

U0114-LOST COMMUNICATION WITH FINAL DRIVE CONTROL MODULE (ALL WHEEL DRIVE CONTROL MODULE-AWD)

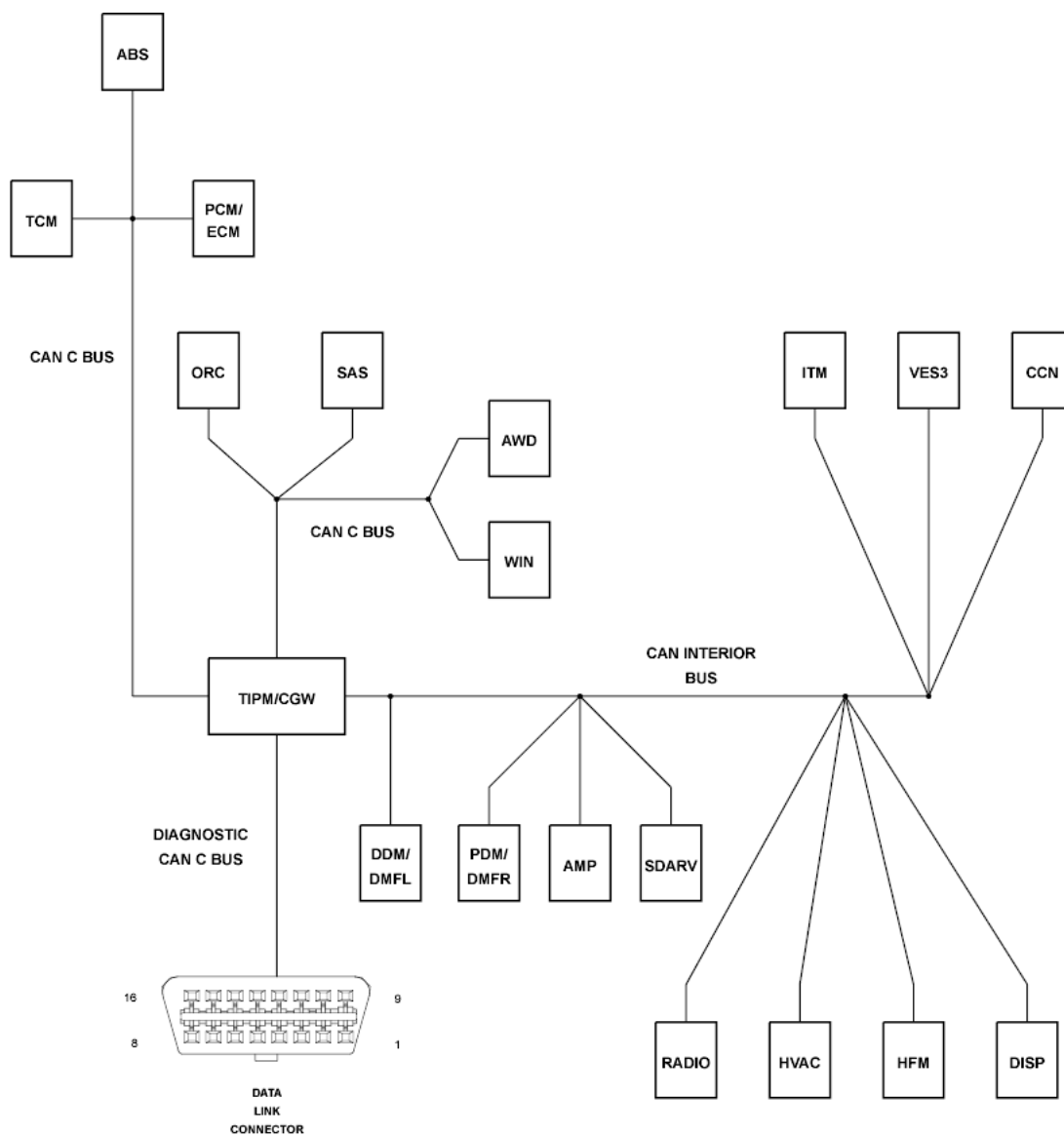


Fig. 54: CAN Interior Bus Circuit Schematic
 Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

• **Set Condition:**

Bus messages not received from the Final Drive Control Module (AWD) for approximately 2 to 5 seconds.

Possible Causes

(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE
 (D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND
 DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
 TIPM NOT CONFIGURED CORRECTLY
 AWD POWER AND GROUND
 ALL WHEEL DRIVE CONTROL MODULE (AWD)
 MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE AWD IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the AWD is active on the bus.

Is the AWD active on the bus?

Yes

- Go to Step 4.

No

- Perform the NO RESPONSE FROM ALL WHEEL DRIVE CONTROL (AWD) MODULE test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCS "Logged Against" the AWD?

Yes

- Replace/update the All Wheel Drive Control Module in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the ORC.
2. Clear active DTCS.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 54** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the appropriate VERIFICATION TEST.

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

U0121-LOST COMMUNICATION WITH ABS

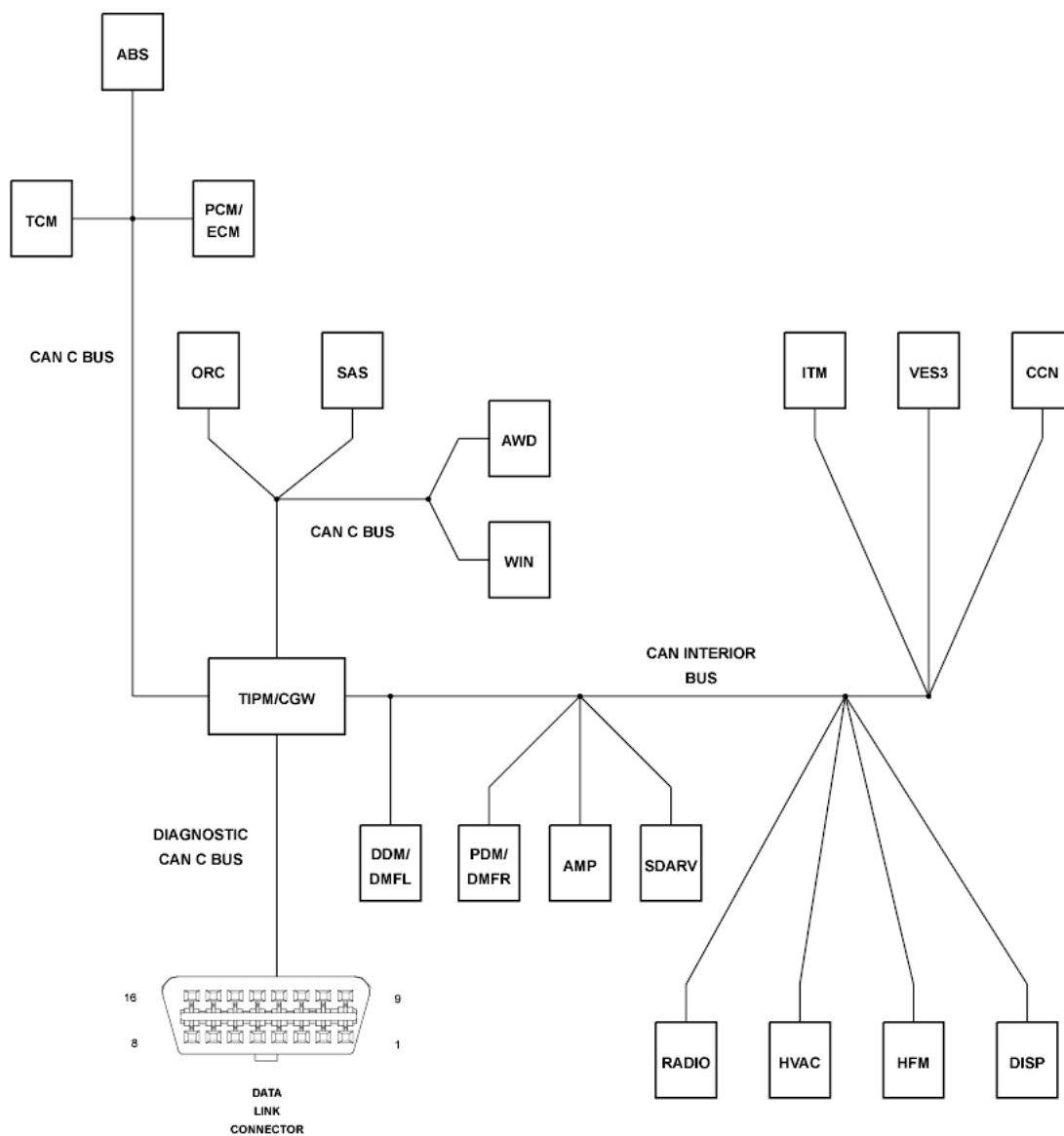


Fig. 55: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

• **Set Condition:**

Bus messages not received from the Anti-Lock Brake Module (ABS) for approximately 2 to 5 seconds.

Possible Causes
(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE (D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES TIPM NOT CONFIGURED CORRECTLY ABS POWER AND GROUND ABS MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

- With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

- With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE ABS IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the ABS is active on the bus.

Is the ABS active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM ABS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the ABS?

Yes

- Replace/update the Anti-Lock Brake Module in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the ABS.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 55** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the appropriate VERIFICATION TEST.

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

U0126-LOST COMMUNICATION WITH SAS

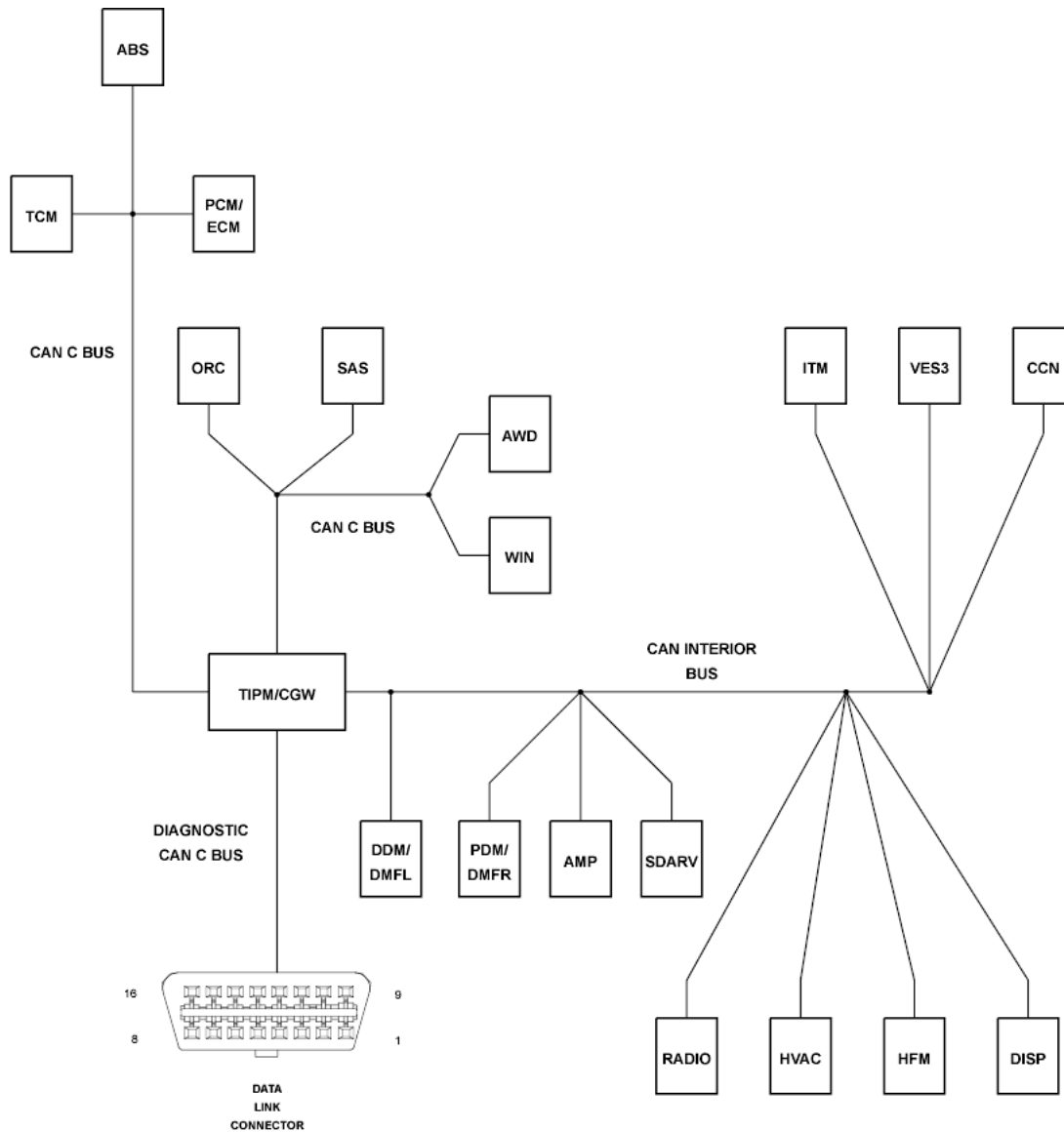


Fig. 56: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

• **Set Condition:**

Bus messages not received from the Steering Angle Sensor (SAS) for approximately 2 to 5 seconds.

Possible Causes

(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE
 (D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND
 DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
 TIPM NOT CONFIGURED CORRECTLY
 SAS POWER AND GROUND
 SAS
 MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE SAS IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the SAS is active on the bus.

Is the SAS active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM THE STEERING ANGLE SENSOR test procedure.
Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCS "Logged Against" the SAS?

Yes

- Replace/update the Steering Angle Sensor in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the SAS.
2. Clear active DTCS.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 56** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the appropriate VERIFICATION TEST.

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

U0141-LOST COMMUNICATION WITH FRONT CONTROL MODULE (TOTALLY INTEGRATED POWER MODULE) (TIPM)

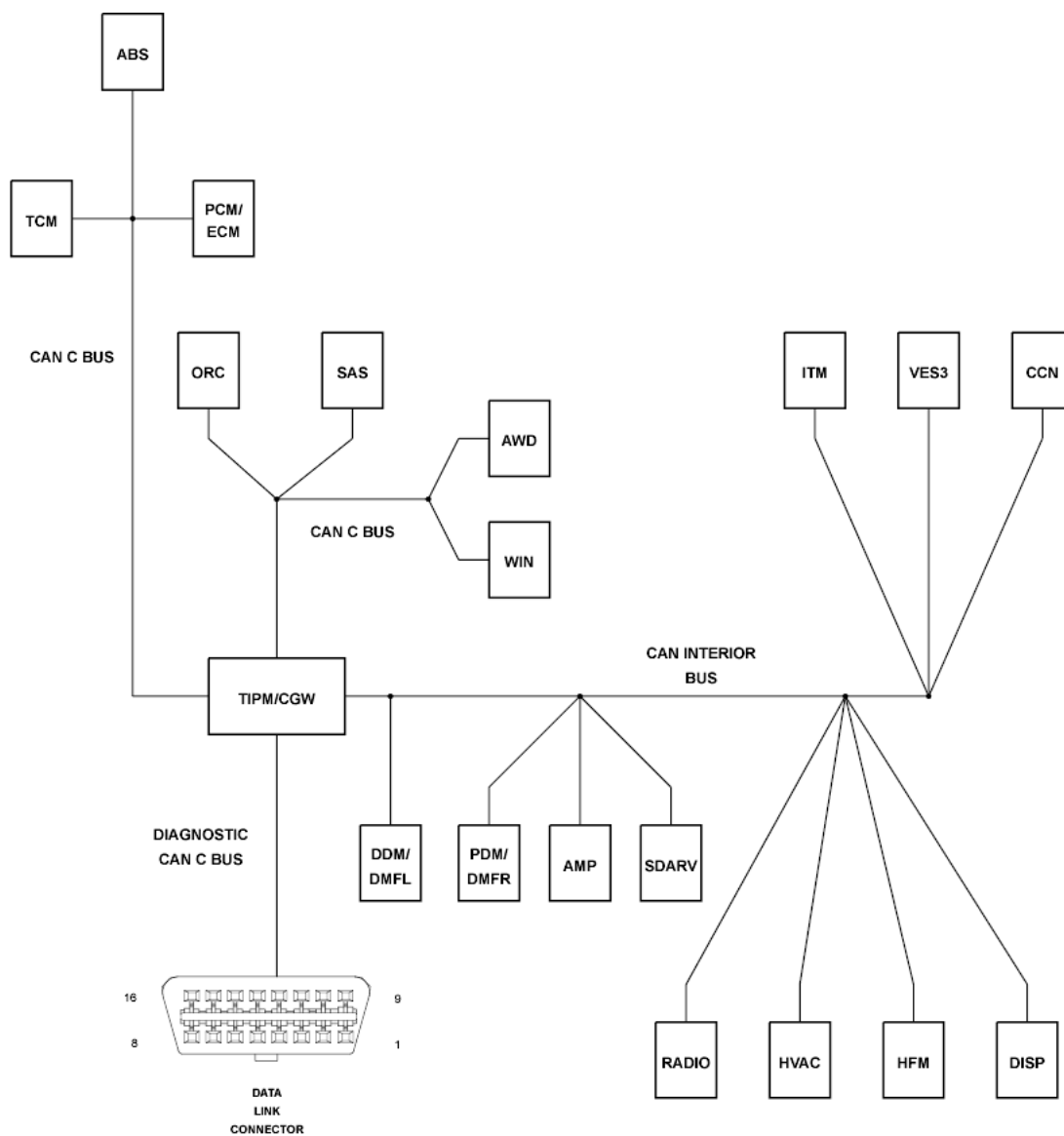


Fig. 57: CAN Interior Bus Circuit Schematic
 Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

- **Set Condition:**

Bus messages not received from the Totally Integrated Power Module (TIPM) for approximately 2 to 5 seconds.

Possible Causes
DIAGNOSTIC CAN C BUS CIRCUITS OPEN OR SHORTED
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
TOTALLY INTEGRATED POWER MODULE POWER AND GROUND
TOTALLY INTEGRATED POWER MODULE
MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE TIPM IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the TIPM is active on the bus.

Is the TIPM active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM TIPM test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the TIPM?

Yes

- Replace/update the Totally Integrated Power Module (TIPM) in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information
- Perform the appropriate VERIFICATION TEST.

U0151-LOST COMMUNICATION WITH ORC

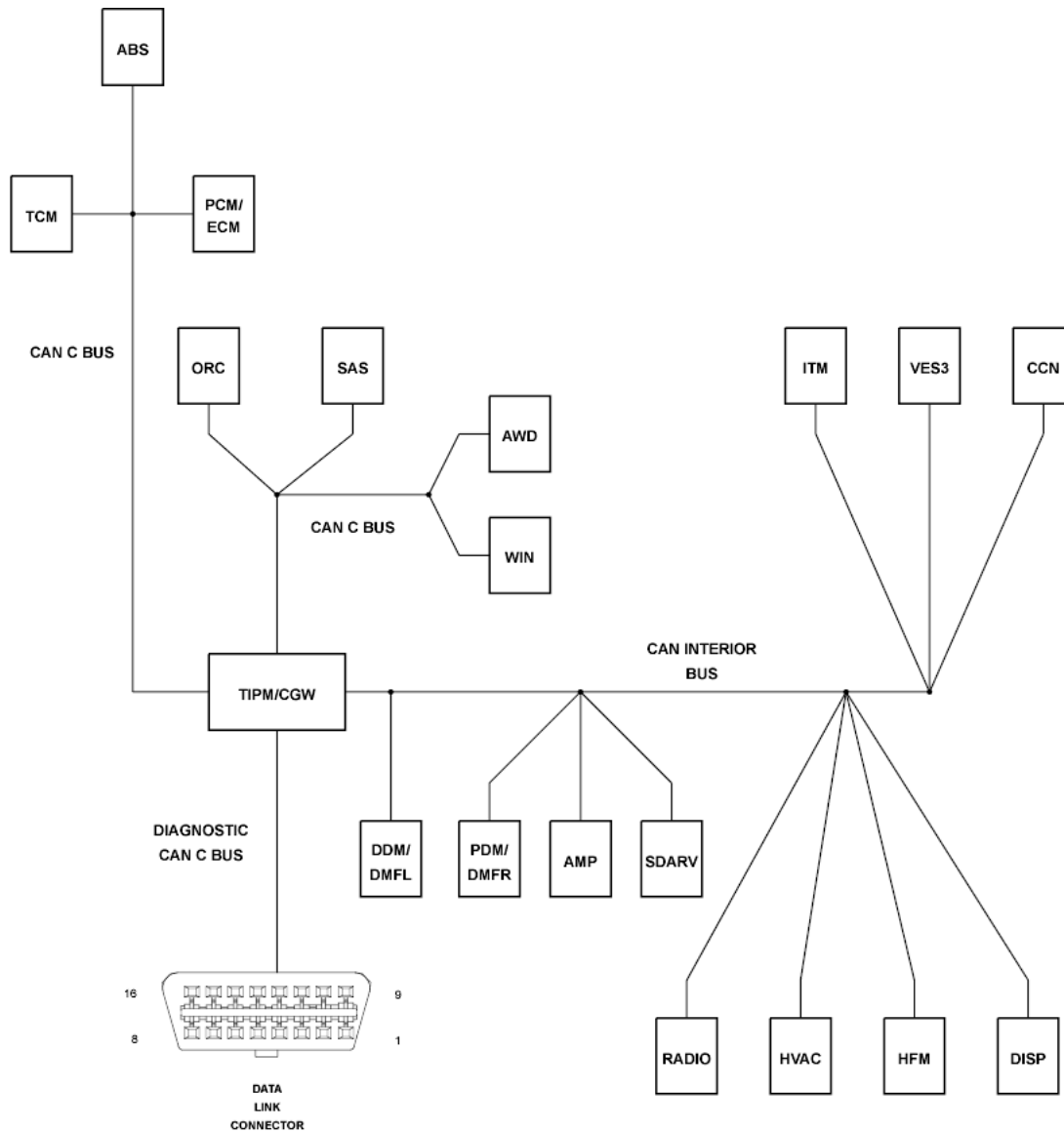


Fig. 58: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

- **Set Condition:**

Bus messages not received from the Occupant Restraint Controller (ORC) for approximately 2 to 5 seconds.

Possible Causes
(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE
(D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
ORC POWER AND GROUND
ORC
MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE ORC IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the ORC is active on the bus.

Is the ORC active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM ORC test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCS "Logged Against" the ORC?

Yes

- Replace/update the Occupant Restraint Controller in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the ORC.
2. Clear active DTCS.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 58** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the appropriate VERIFICATION TEST.

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

U0155-LOST COMMUNICATION WITH CLUSTER/CCN

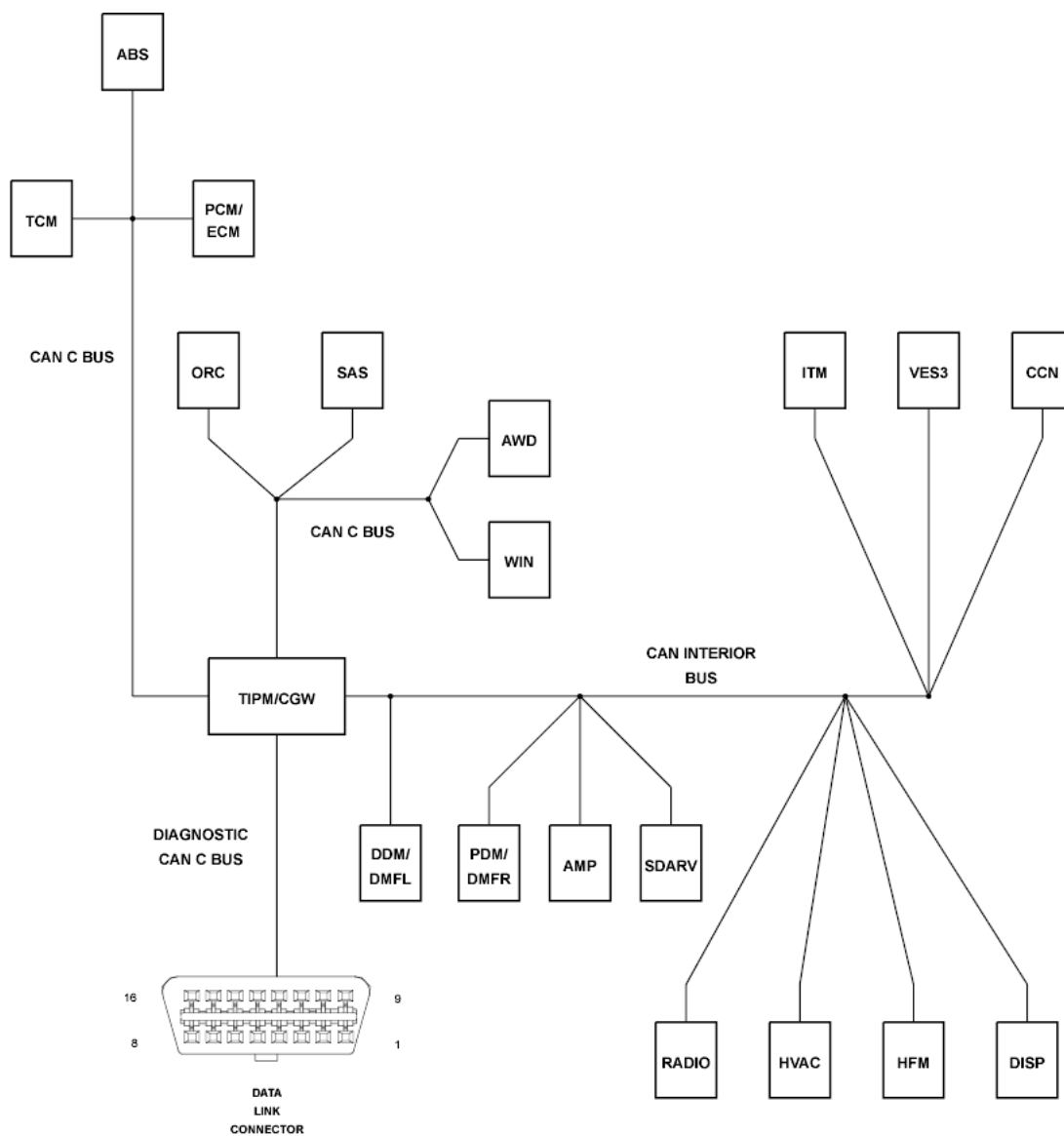


Fig. 59: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

• **Set Condition:**

Bus messages not received from the Cluster/CCN for approximately 2 to 5 seconds.

Possible Causes

(D265) CAN INTERIOR BUS(+) (125k) CIRCUIT SHORTED TO VOLTAGE
 (D264) CAN INTERIOR BUS(-) (125k) CIRCUIT SHORTED TO GROUND
 DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
 TIPM NOT CONFIGURED CORRECTLY
 CLUSTER/CCN POWER AND GROUND
 CLUSTER/CCN
 MODULE THAT SET THE DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCS.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read active DTCS from all modules.

NOTE: Check for TIPM configuration, CAN Interior Bus hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCS.

Does the scan tool display any active DTCS to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE CCN IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the CCN is active on the bus.

Is the CCN active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM CCN test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the CCN?

Yes

- Replace/update the Cluster (CCN) in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the Cluster/CCN.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 59** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN Interior BUS (125K) modules show Lost Communication with the remaining CAN Interior BUS (125K) modules?

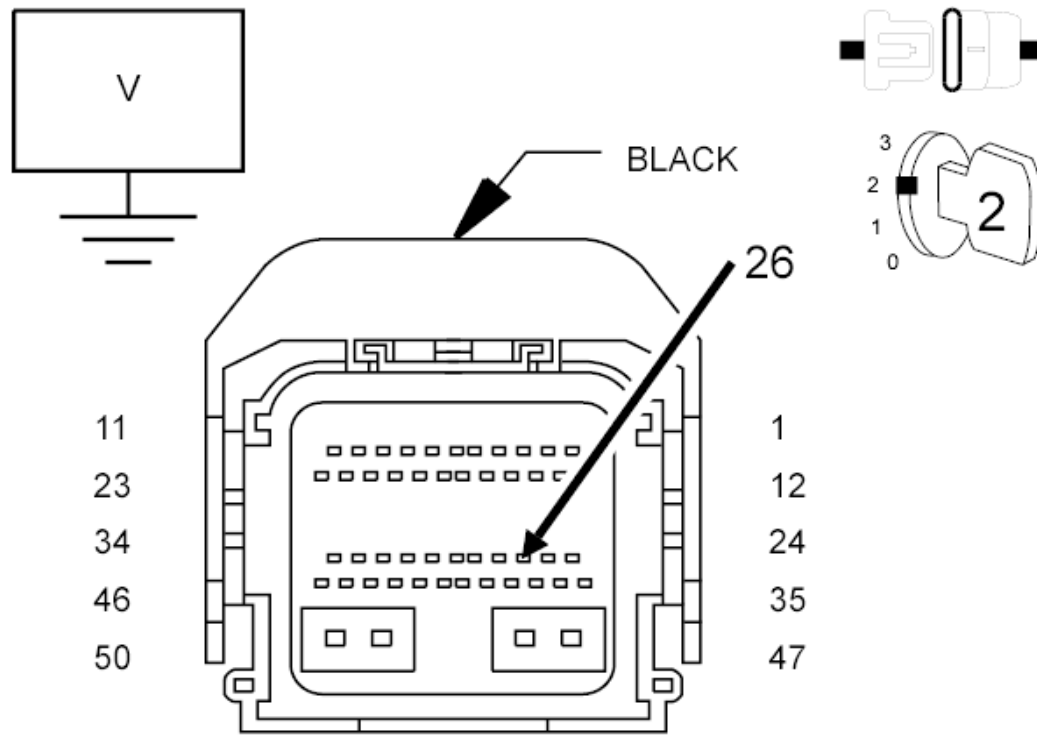
Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

8. (D265) CAN INTERIOR BUS(+) (125K) CIRCUIT SHORTED TO VOLTAGE



MODULE-
TOTALLY
INTEGRATED
POWER C7

106449

Fig. 60: Measuring Voltage Between CAN Interior Bus(+) Circuit & Ground
Courtesy of CHRYSLER LLC

1. Measure the voltage between the (D265) CAN Interior Bus(+) (125K) circuit and ground.

Is the voltage above 5 volts?

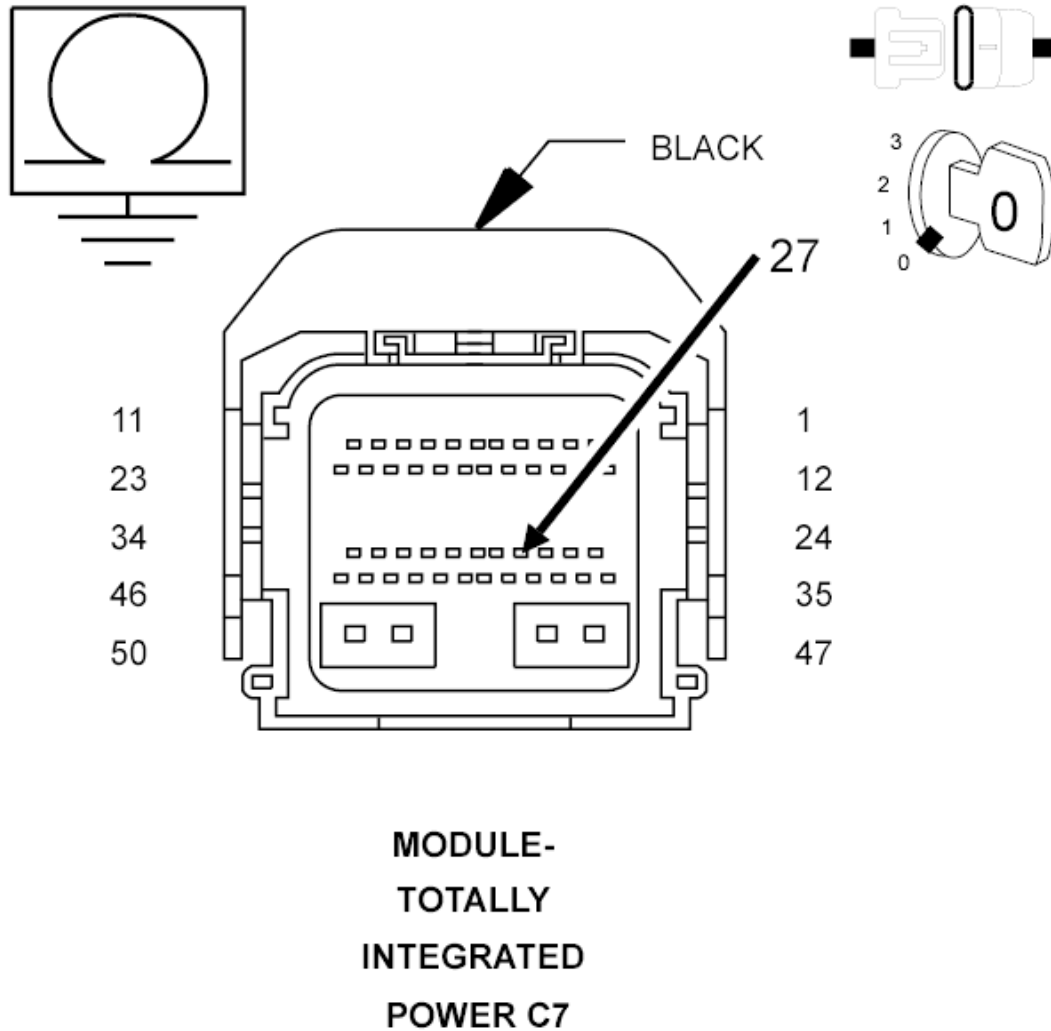
Yes

- Repair the (D265) CAN Interior Bus(+) (125K) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D264) CAN INTERIOR BUS(-) (125K) CIRCUIT SHORTED TO GROUND



106443

Fig. 61: Measuring Resistance Between Ground & CAN Interior Bus(-) Circuit
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D264) CAN Interior Bus(-) (125K) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D264) CAN Interior Bus(-) (125K) circuit for a short to ground.

- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0164-LOST COMMUNICATION WITH HVAC CONTROL MODULE

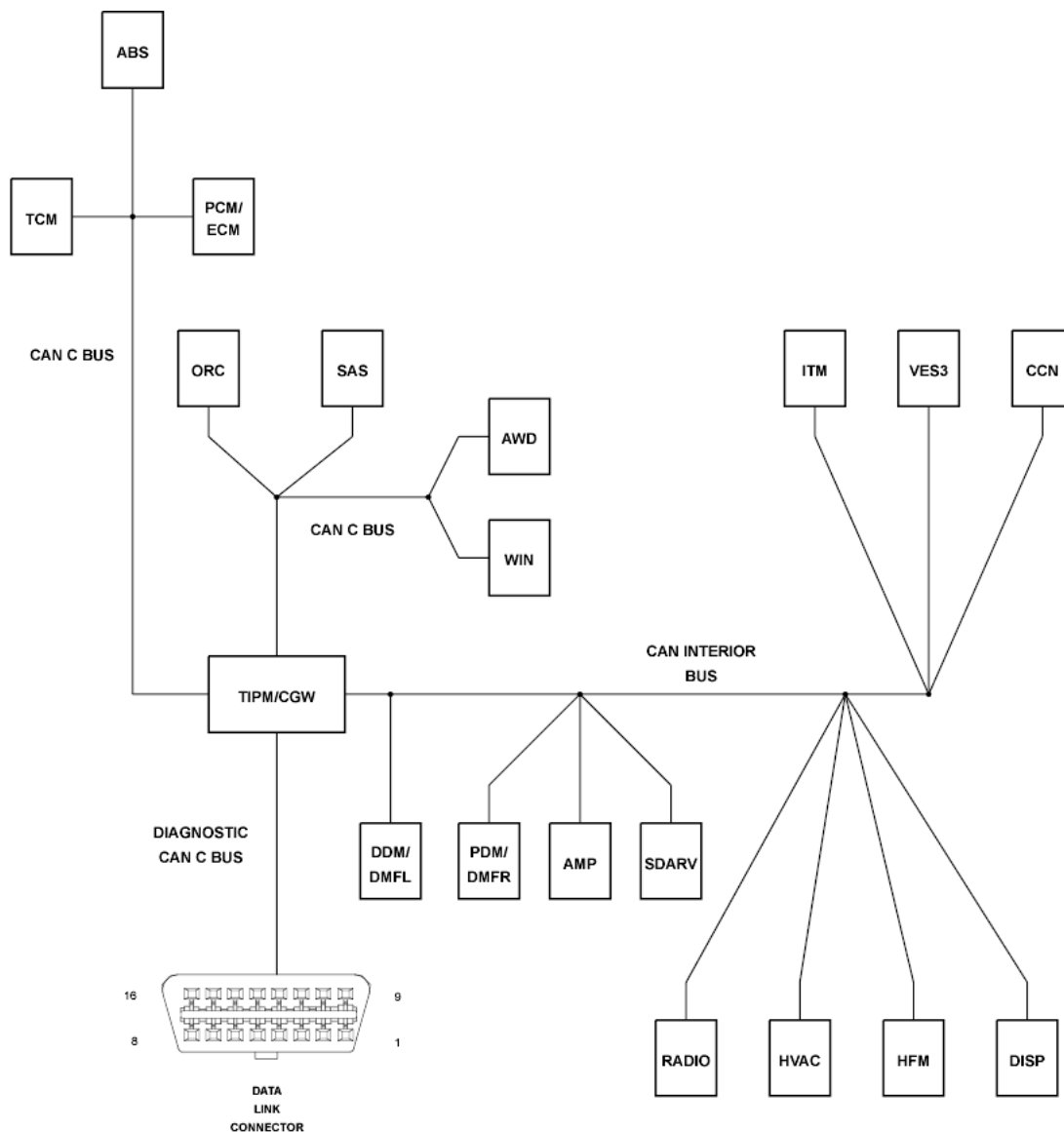


Fig. 62: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

- **Set Condition:**

Bus messages not received from the HVAC Control Module for approximately 2 to 5 seconds.

Possible Causes
(D265) CAN INTERIOR BUS(+) (125k) CIRCUIT SHORTED TO VOLTAGE
(D264) CAN INTERIOR BUS(-) (125k) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
HVAC POWER AND GROUND
HVAC CONTROL MODULE
MODULE THAT SET THE DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCS.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN Interior Bus hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE HVAC IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the HVAC is active on the bus.

Is the HVAC active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM HVAC test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the HVAC?

Yes

- Replace/update the HVAC Control Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the HVAC.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 62** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

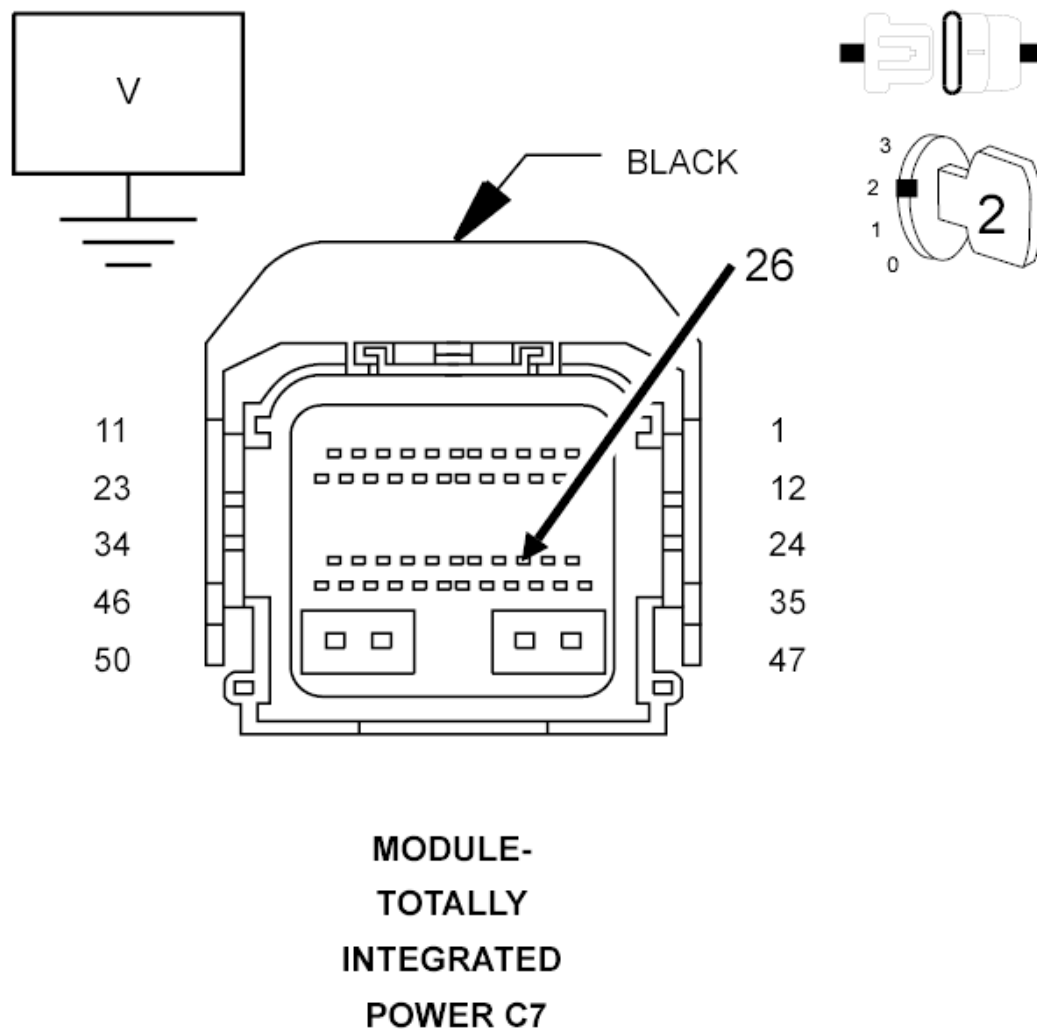
Does the TIPM and other CAN Interior BUS (125K) modules show Lost Communication with the remaining CAN Interior BUS (125K) modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE,**

Totally Integrated Power (TIPM) - Standard Procedure .**8. (D265) CAN INTERIOR BUS(+) (125K) CIRCUIT SHORTED TO VOLTAGE**

106449

Fig. 63: Measuring Voltage Between CAN Interior Bus(+) Circuit & Ground
 Courtesy of CHRYSLER LLC

1. Measure the voltage between the (D265) CAN Interior Bus(+) (125K) circuit and ground.

Is the voltage above 5 volts?

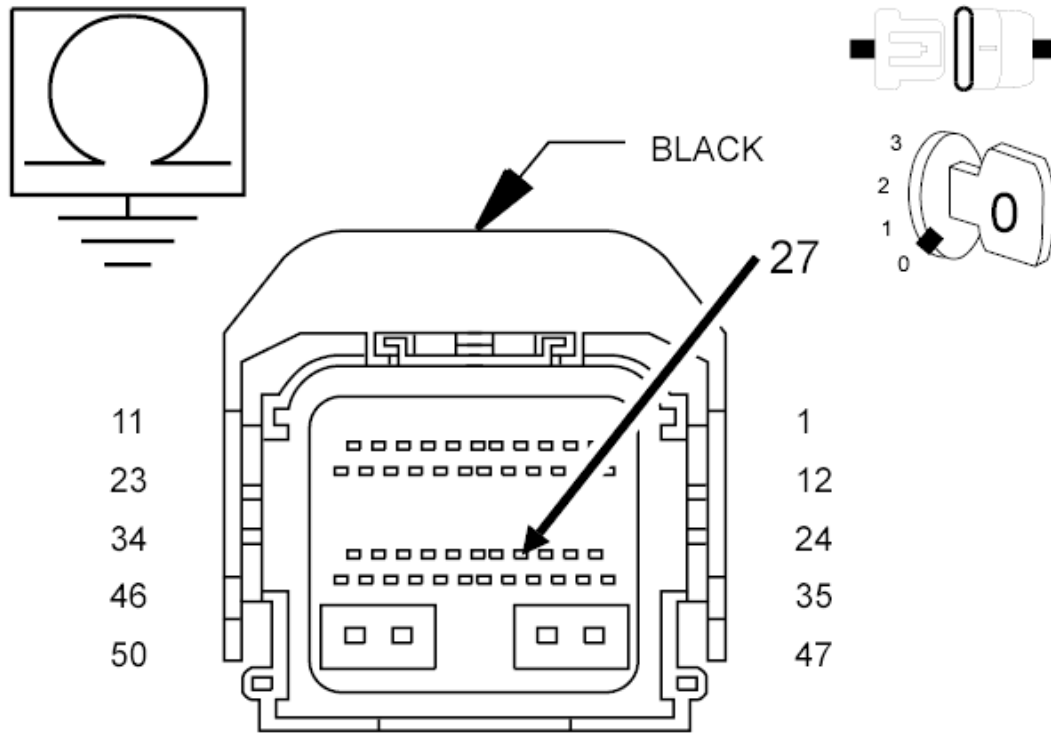
Yes

- Repair the (D265) CAN Interior Bus(+) (125K) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure .**

No

- Go to Step 9.

9. (D264) CAN INTERIOR BUS(-) (125K) CIRCUIT SHORTED TO GROUND



MODULE-
TOTALLY
INTEGRATED
POWER C7

106443

Fig. 64: Measuring Resistance Between Ground & CAN Interior Bus(-) Circuit
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D264) CAN Interior Bus(-) (125K) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D264) CAN Interior Bus(-) (125K) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0167-LOST COMMUNICATION WITH INTRUSION TRANSCIEVER CONTROL MODULE (ITM)

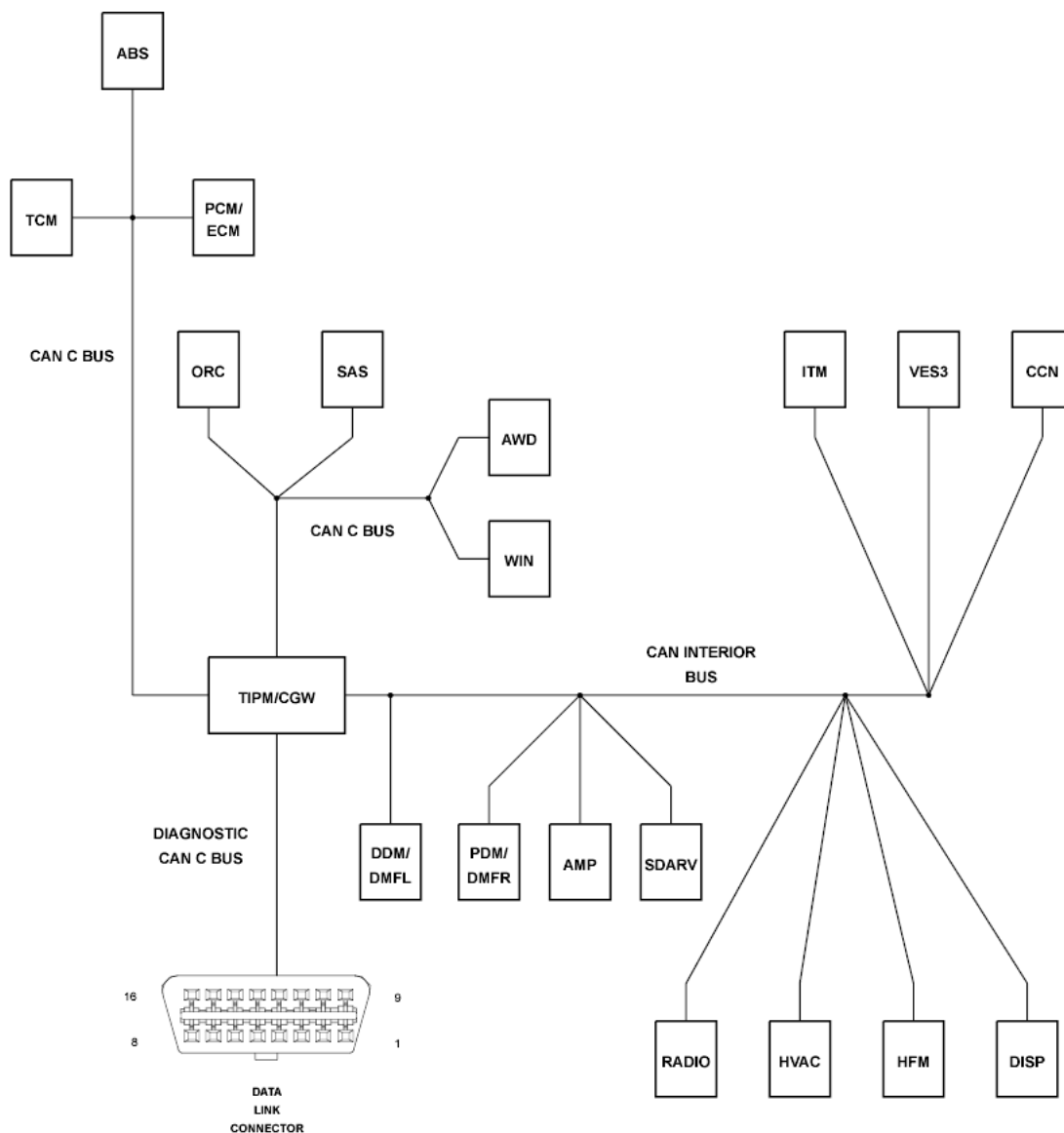


Fig. 65: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

- **Set Condition:**

Bus messages not received from the Intrusion Transceiver Control Module (ITM) for approximately 2 to 5 seconds.

Possible Causes
(D265) CAN INTERIOR BUS(+) (125k) CIRCUIT SHORTED TO VOLTAGE
(D264) CAN INTERIOR BUS(-) (125k) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
ITM POWER AND GROUND
INTRUSION TRANSCEIVER CONTROL MODULE
MODULE THAT SET THE DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read active DTCS from all modules.

NOTE: Check for TIPM configuration, CAN Interior Bus hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCS.

Does the scan tool display any active DTCS to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE ITM IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the ITM is active on the bus.

Is the ITM active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM ITM test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCS "Logged Against" the ITM?

Yes

- Replace/update the Intrusion Transceiver Control Module in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the ITM.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 65** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN Interior BUS (125K) modules show Lost Communication with the remaining CAN Interior BUS (125K) modules?

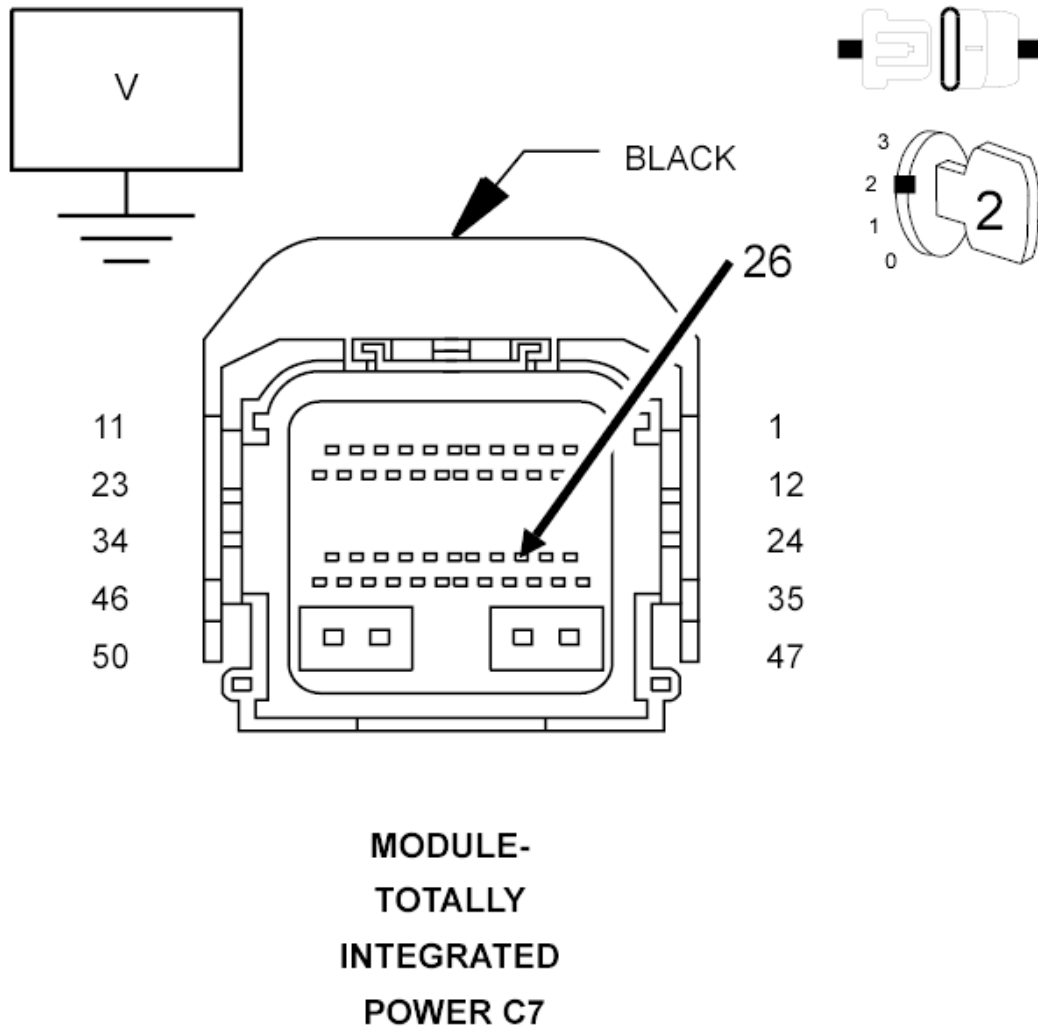
Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

8. (D265) CAN INTERIOR BUS(+) (125K) CIRCUIT SHORTED TO VOLTAGE



106449

Fig. 66: Measuring Voltage Between CAN Interior Bus(+) Circuit & Ground
 Courtesy of CHRYSLER LLC

1. Measure the voltage between the (D265) CAN Interior Bus(+) (125K) circuit and ground.

Is the voltage above 5 volts?

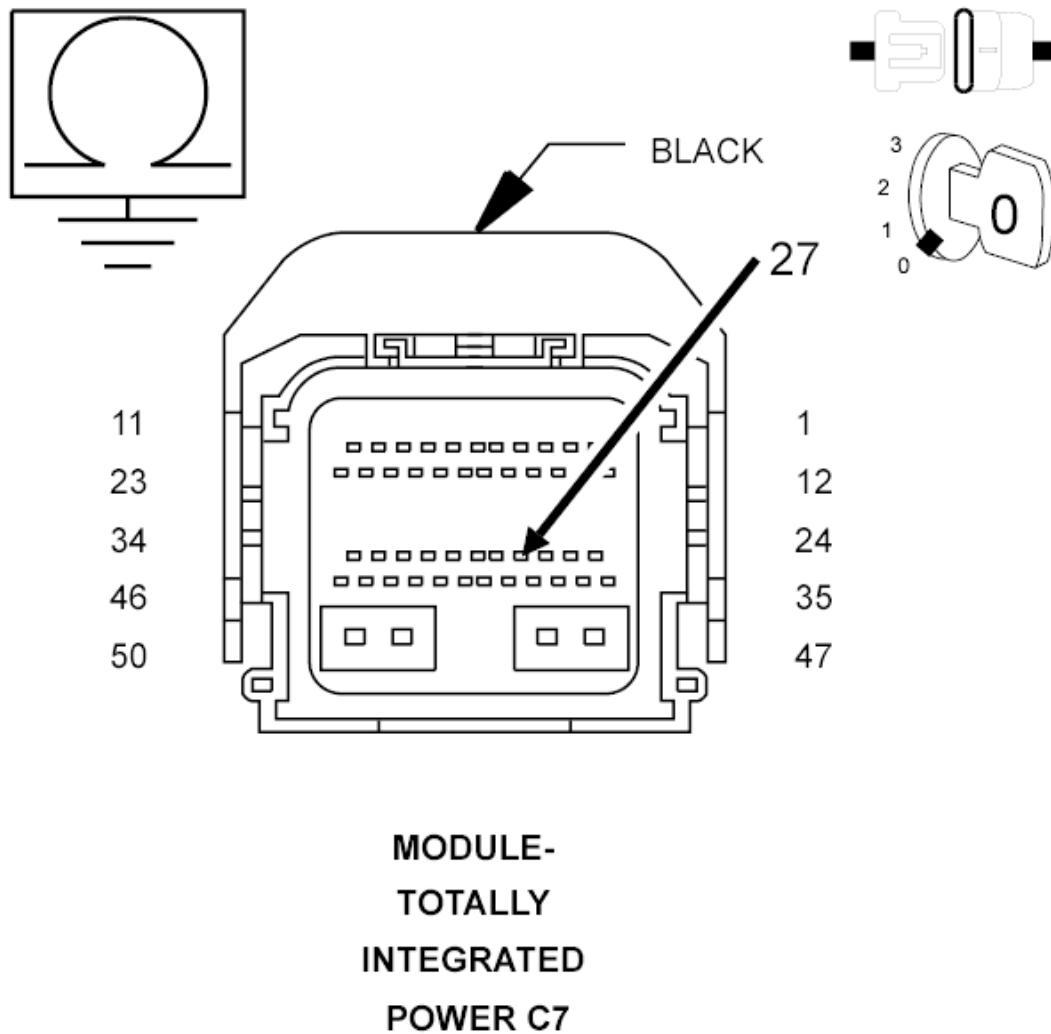
Yes

- Repair the (D265) CAN Interior Bus(+) (125K) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 9.

9. (D264) CAN INTERIOR BUS(-) (125K) CIRCUIT SHORTED TO GROUND



106443

Fig. 67: Measuring Resistance Between Ground & CAN Interior Bus(-) Circuit
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D264) CAN Interior Bus(-) (125K) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D264) CAN Interior Bus(-) (125K) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0168-LOST COMMUNICATION WITH VEHICLE SECURITY CONTROL MODULE (WIRELESS IGNITION NODE OR WIN)

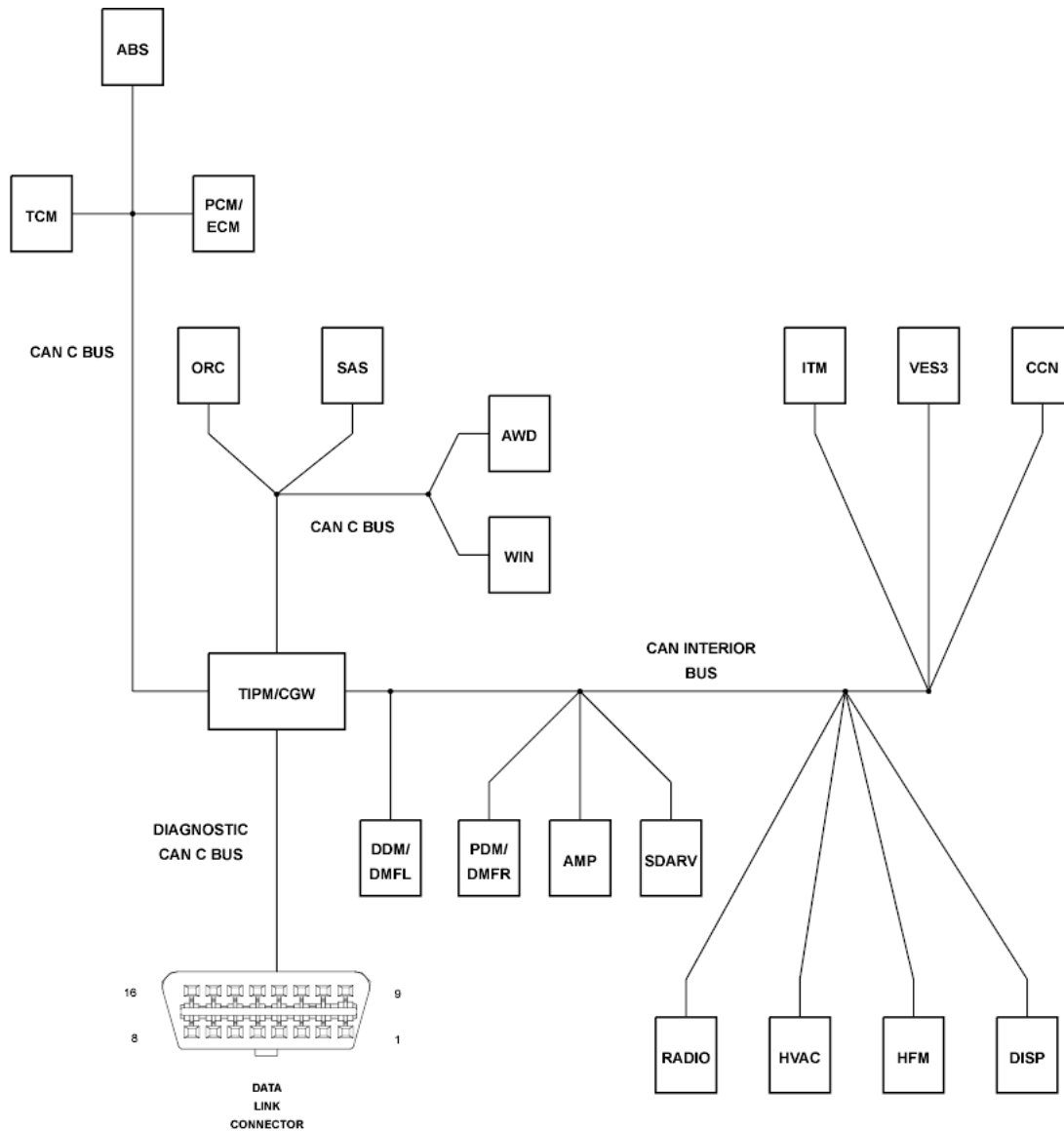


Fig. 68: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

Ignition Off Draw (IOD) fused installed.

Totally Integrated Power Module (TIPM) is configured correctly.

• **Set Condition:**

Bus messages not received from the Vehicle Security Control Module (also known as the Wireless Ignition Node or WIN) for approximately two to five seconds.

Possible Causes

(D51) OR (D65) CAN C BUS(+) CIRCUIT SHORTED TO VOLTAGE
 (D52) OR (D64) CAN C BUS(-) CIRCUIT SHORTED TO GROUND
 DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
 TIPM NOT CONFIGURED CORRECTLY
 WIN POWER AND GROUND
 WIRELESS IGNITION NODE (WIN)
 MODULE THAT SET THIS DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Make sure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read all active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN C hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Refer to the appropriate Diagnostic Information, and perform the appropriate diagnostic

procedure.

No

- Go to Step 3.

3. VERIFY THAT THE WIN IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the WIN is active on the bus.

Is the WIN active on the bus?

Yes

- Go to Step 4.

No

- Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** and perform the NO RESPONSE FROM WIN diagnostic procedure.

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the WIN?

Yes

- Replace/update the Wireless Ignition Node in accordance with the service information.
- Perform the WIN VERIFICATION TEST. Refer to **DTC-Based Diagnostics/NODE, Wireless Ignition (WIN) - Standard Procedure**.

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the WIN.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 68** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the appropriate VERIFICATION TEST.

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN C BUS modules show Lost Communication with the remaining CAN C BUS modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

8. (D52) OR (D65) CAN C BUS (+) CIRCUIT SHORTED TO VOLTAGE

1. Measure the voltage between the (D52) CAN C Bus (+) circuit and ground.
2. Measure the voltage between the (D65) CAN C Bus (+) circuit and ground.

Is the voltage above 5 volts?

Yes

- Repair the (D52) or (D65) CAN C Bus (+) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D51) OR (D64) CAN C BUS (-) CIRCUIT SHORTED TO GROUND

1. Turn the ignition off.
2. Measure the resistance between ground and the (D51) CAN C Bus (-) circuit.
3. Measure the resistance between ground and the (D64) CAN C Bus (-) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D51) or (D64) CAN C Bus (-) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the appropriate VERIFICATION TEST.

U0184-LOST COMMUNICATION WITH RADIO

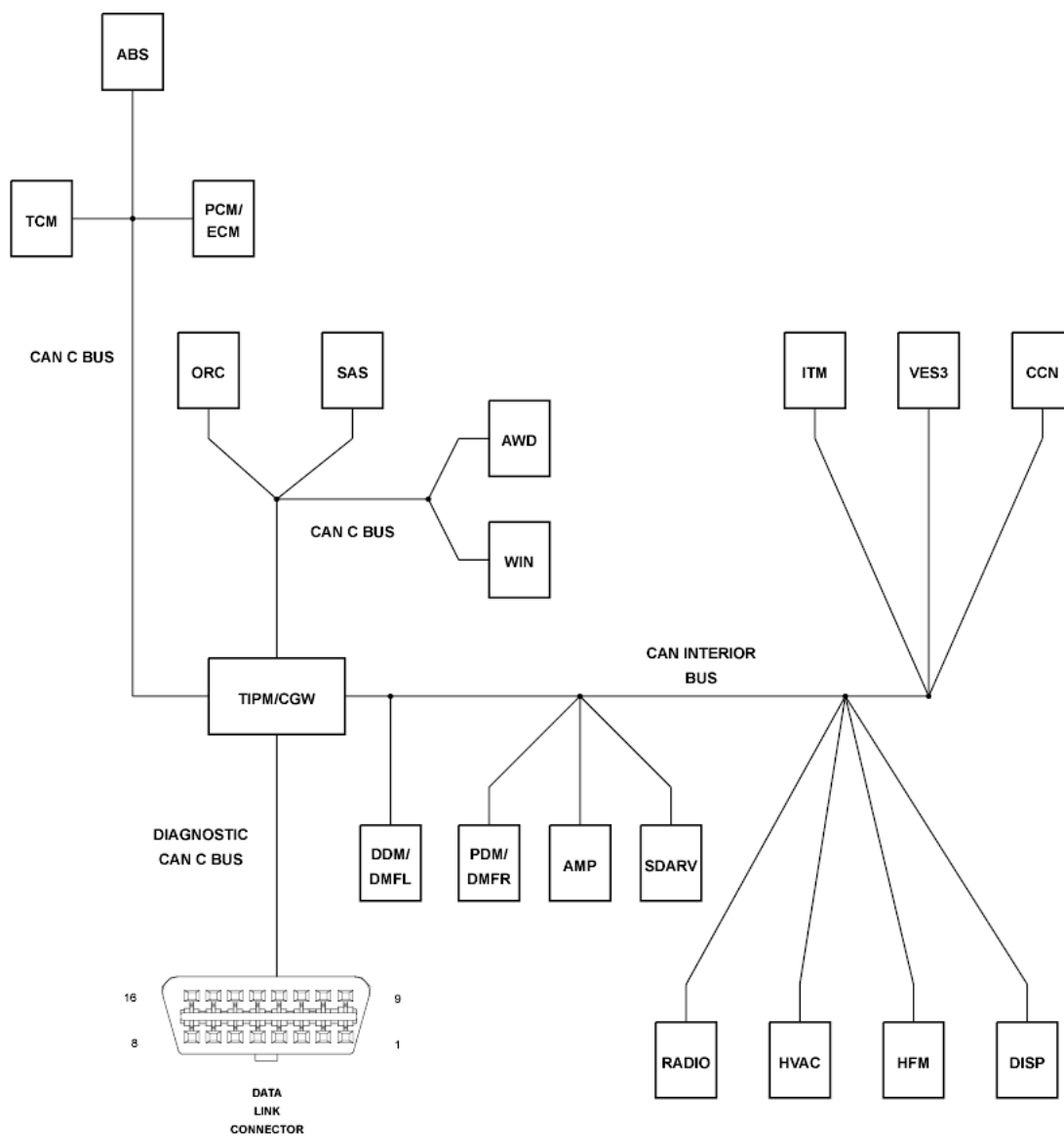


Fig. 69: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS**.

• **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

• **Set Condition:**

Bus messages not received from the Radio for approximately 2 to 5 seconds.

Possible Causes

(D265) CAN INTERIOR BUS(+) (125k) CIRCUIT SHORTED TO VOLTAGE
(D264) CAN INTERIOR BUS(-) (125k) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
RADIO POWER AND GROUND
RADIO
MODULE THAT SET THE DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing**.

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN Interior Bus hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE RADIO IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the Radio is active on the bus.

Is the Radio active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM RADIO test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCS "Logged Against" the Radio?

Yes

- Replace/update the Radio in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the Radio.
2. Clear active DTCS.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 69** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

Does the TIPM and other CAN Interior BUS (125K) modules show Lost Communication with the remaining CAN Interior BUS (125K) modules?

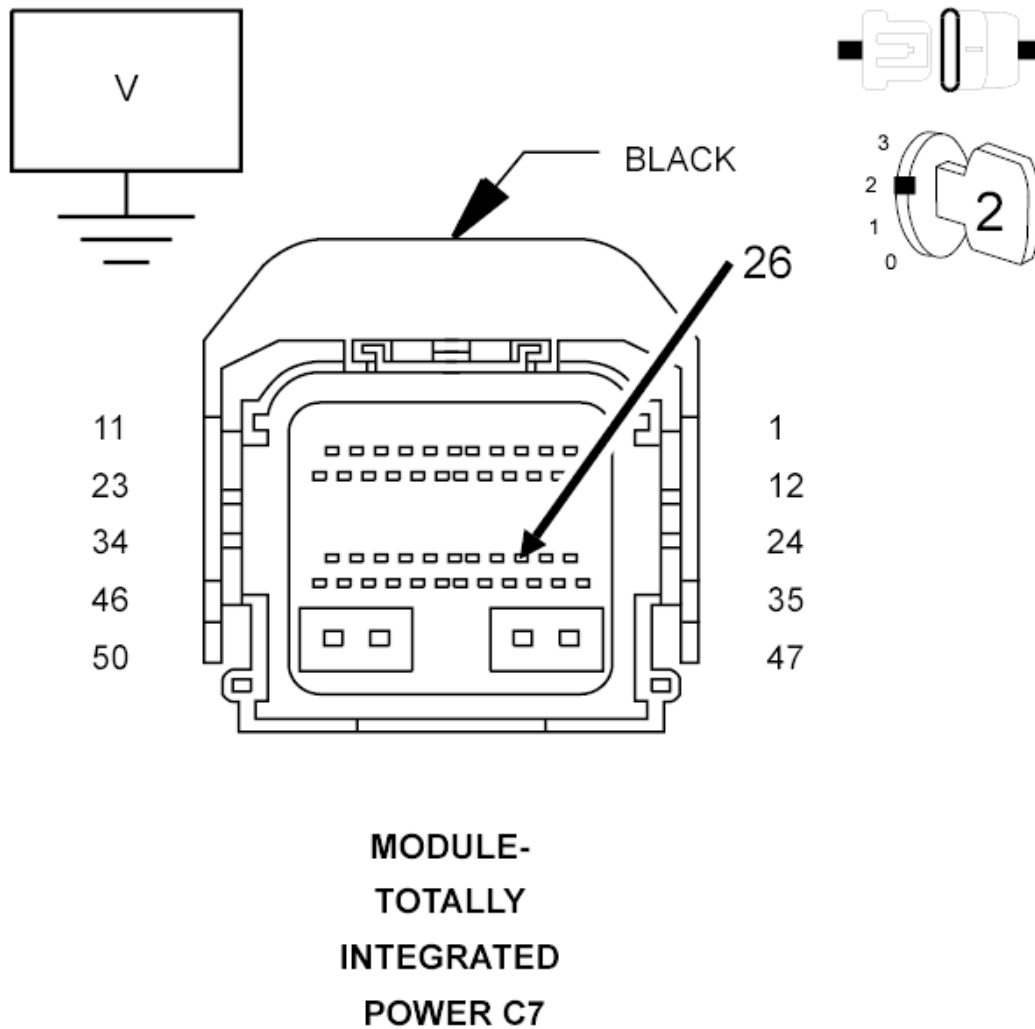
Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

8. (D265) CAN INTERIOR BUS(+) (125K) CIRCUIT SHORTED TO VOLTAGE



106449

Fig. 70: Measuring Voltage Between CAN Interior Bus(+) Circuit & Ground
Courtesy of CHRYSLER LLC

1. Measure the voltage between the (D265) CAN Interior Bus(+) (125K) circuit and ground.

Is the voltage above 5 volts?

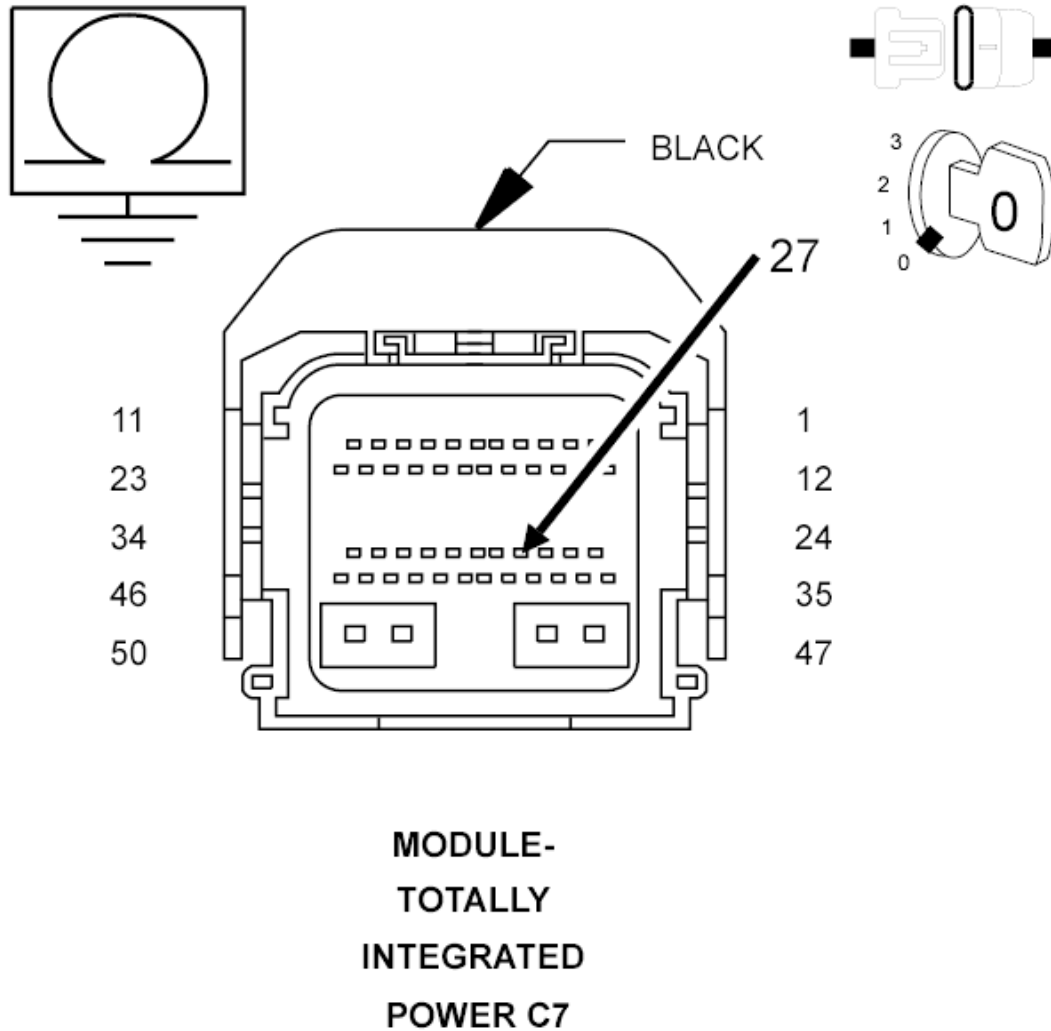
Yes

- Repair the (D265) CAN Interior Bus(+) (125K) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

No

- Go to Step 9.

9. (D264) CAN INTERIOR BUS(-) (125K) CIRCUIT SHORTED TO GROUND



106443

Fig. 71: Measuring Resistance Between Ground & CAN Interior Bus(-) Circuit
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D264) CAN Interior Bus(-) (125K) circuit.

Is the resistance below 10K Ohms?

Yes

- Repair the (D264) CAN Interior Bus(-) (125K) circuit for a short to ground.

- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0186-LOST COMMUNICATION WITH AUDIO AMPLIFIER (AMP)

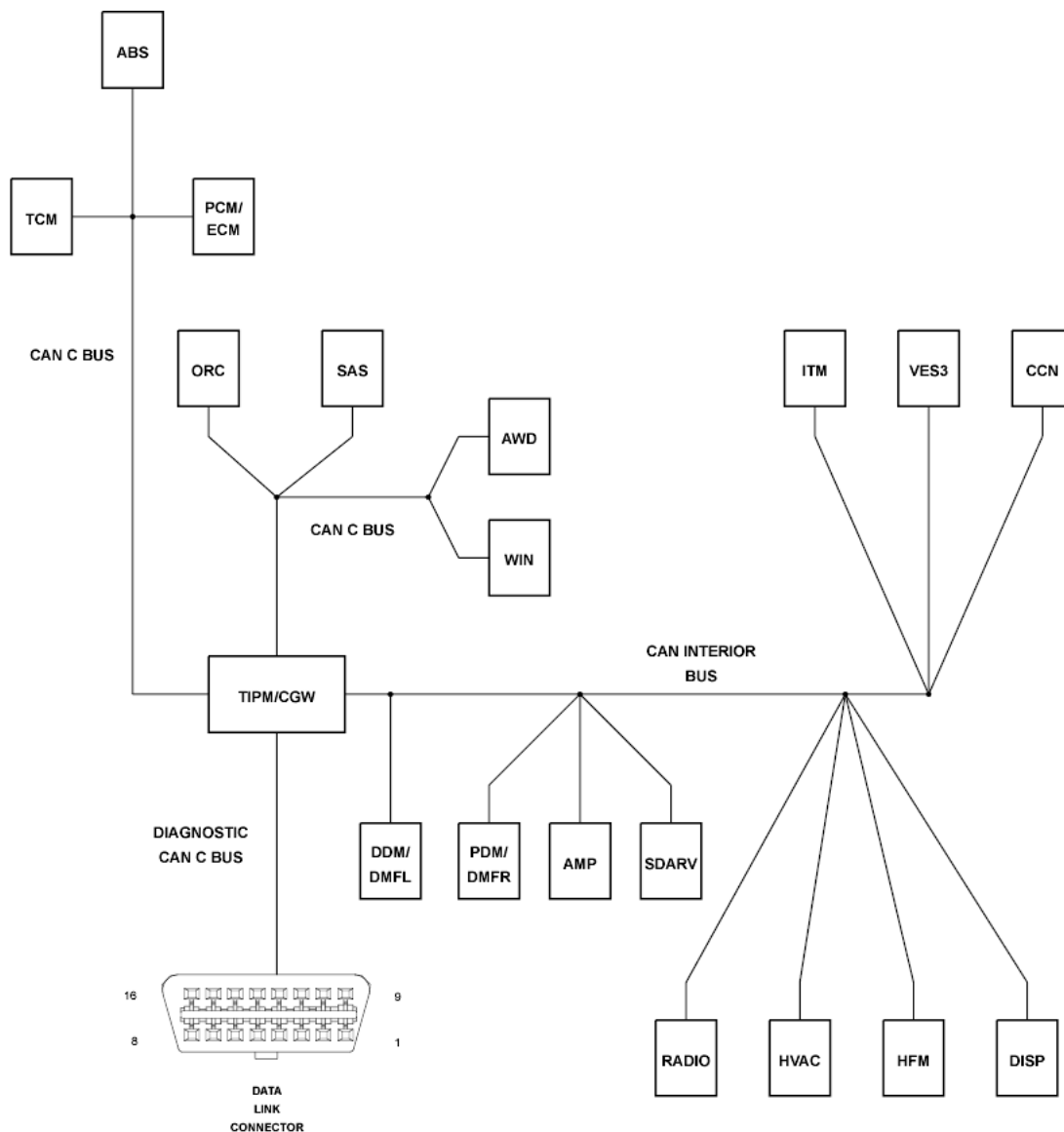


Fig. 72: CAN Interior Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** .

- **When Monitored:**

With the ignition on.

Battery voltage between 10 and 16 volts.

IOD fuse installed.

TIPM is configured correctly.

- **Set Condition:**

Bus messages not received from the Audio Amplifier (AMP) for approximately 2 to 5 seconds.

Possible Causes
(D265) CAN INTERIOR BUS(+) (125k) CIRCUIT SHORTED TO VOLTAGE
(D264) CAN INTERIOR BUS(-) (125k) CIRCUIT SHORTED TO GROUND
DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
TIPM NOT CONFIGURED CORRECTLY
AMP POWER AND GROUND
AUDIO AMPLIFIER
MODULE THAT SET THE DTC

DIAGNOSTIC TEST

1. VERIFY DTC IS ACTIVE

NOTE: Ensure the IOD fuse is installed and battery voltage is between 10 and 16 volts before proceeding.

1. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Go to Step 2.

No

- Perform the STORED LOST COMMUNICATION DTCS test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

2. CHECK FOR ANY OF THE FOLLOWING ACTIVE DTCS

1. With the scan tool, read active DTCs from all modules.

NOTE: Check for TIPM configuration, CAN Interior Bus hardware electrical, VIN Missing/Mismatch, battery or ignition related DTCs.

Does the scan tool display any active DTCs to the conditions listed above?

Yes

- Diagnose and repair the DTC. Refer to the appropriate Diagnostic Information.

No

- Go to Step 3.

3. VERIFY THAT THE AMP IS ACTIVE ON THE BUS

1. Turn the ignition on.
2. With the scan tool, select Network Diagnostics.
3. Verify that the AMP is active on the bus.

Is the AMP active on the bus?

Yes

- Go to Step 4.

No

- Refer to the NO RESPONSE FROM AMP test procedure. Refer to **Non-DTC Diagnostics/Communication - Diagnosis and Testing** .

4. CHECK FOR ADDITIONAL COMMUNICATION RELATED DTCS

1. With the scan tool, select Network Diagnostics.

Is there more than one module with active DTCs "Logged Against" the AMP?

Yes

- Replace/update the Audio Amplifier in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 5.

5. CLEAR DTC IN MODULE SETTING FAULT

1. With the scan tool, select the module setting the DTC against the AMP.
2. Clear active DTCs.

Is this DTC still active?

Yes

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to Step 6.

6. CYCLE IGNITION

1. Cycle the ignition from RUN to OFF three times ending with the key in the RUN position.

Does this DTC become active?

Yes

- Go to Step 7.

No

- The condition is not present at this time. Using **Fig. 72** as a guide, inspect the wiring for chafed, pierced, pinched, and partially broken wires and the wiring harness connectors for broken, bent, pushed out, and corroded terminals.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

7. CHECK FOR ADDITIONAL LOST COMMUNICATION FAULTS

1. With the scan tool, select Network Diagnostics.

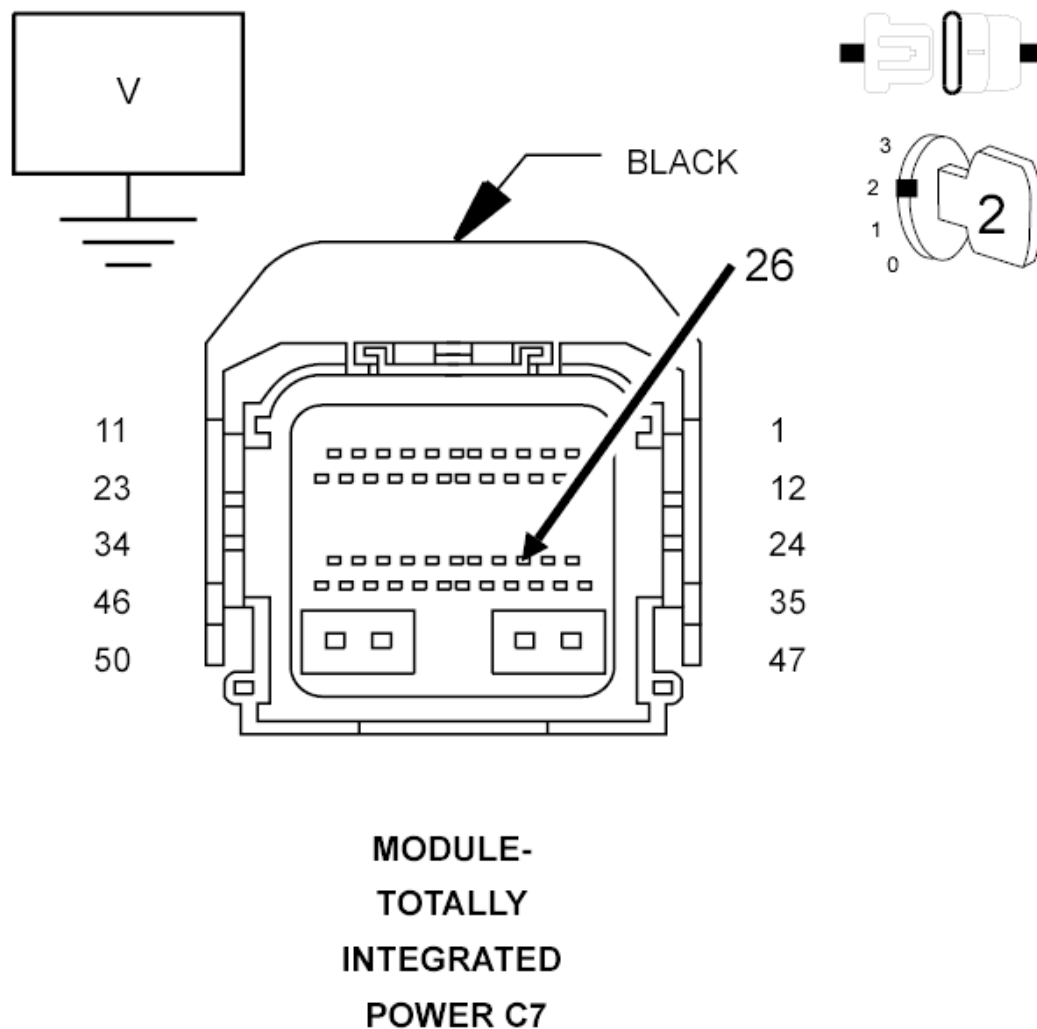
Does the TIPM and other CAN Interior BUS (125K) modules show Lost Communication with the remaining CAN Interior BUS (125K) modules?

Yes

- Go to Step 8.

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE,**

Totally Integrated Power (TIPM) - Standard Procedure .**8. (D265) CAN INTERIOR BUS(+) (125K) CIRCUIT SHORTED TO VOLTAGE**

106449

Fig. 73: Measuring Voltage Between CAN Interior Bus(+) Circuit & Ground
 Courtesy of CHRYSLER LLC

1. Measure the voltage between the (D265) CAN Interior Bus(+) (125K) circuit and ground.

Is the voltage above 5 volts?

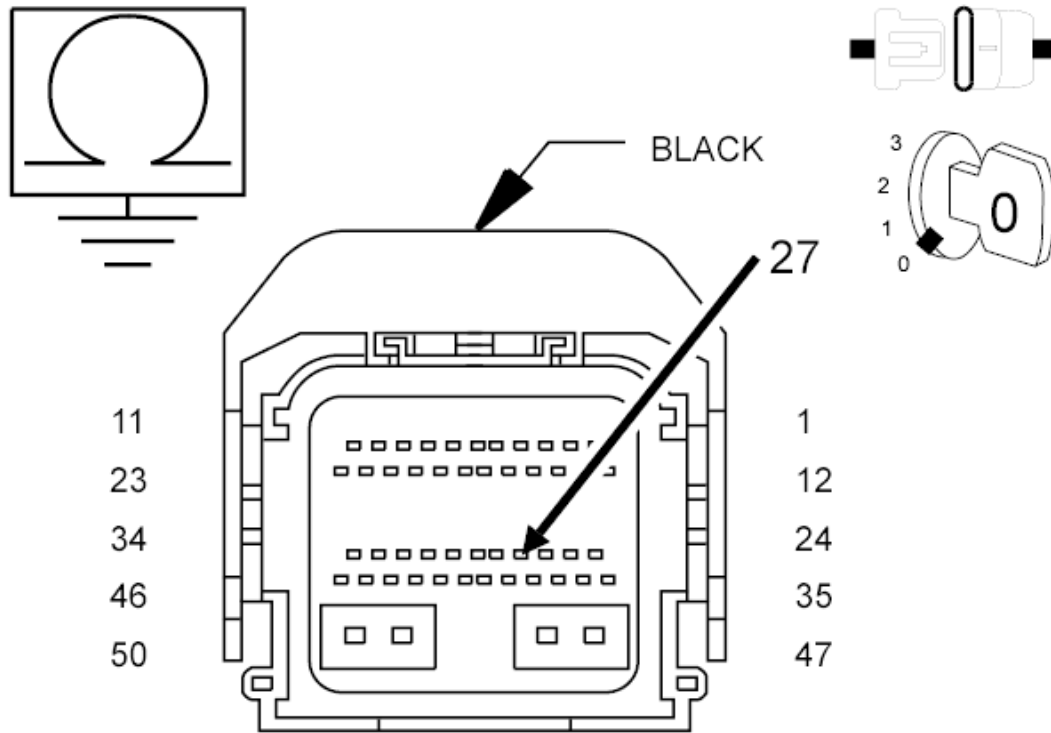
Yes

- Repair the (D265) CAN Interior Bus(+) (125K) circuit for a short to voltage.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure .**

No

- Go to Step 9.

9. (D264) CAN INTERIOR BUS(-) (125K) CIRCUIT SHORTED TO GROUND



MODULE-
TOTALLY
INTEGRATED
POWER C7

106443

Fig. 74: Measuring Resistance Between Ground & CAN Interior Bus(-) Circuit
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between ground and the (D264) CAN Interior Bus(-) (125K) circuit.

Is the resistance below 10K Ohms?

Yes

2009 Dodge Journey R/T

2009 ACCESSORIES AND EQUIPMENT Totally Integrated Power Module (TIPM) - Electrical Diagnostics - Journey

- Repair the (D264) CAN Interior Bus(-) (125K) circuit for a short to ground.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Replace/update the module that set this DTC in accordance with the service information.
- Perform the BODY VERIFICATION TEST. See **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .