

2009 Dodge Journey R/T

2009 ACCESSORIES AND EQUIPMENT Intrusion Transceiver Module (ITM) - Electrical Diagnostics - Journey

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Intrusion Transceiver Module (ITM) - Electrical Diagnostics - Journey

DIAGNOSTIC CODE INDEX

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DTC	Description
<u>B1A20</u>	PRE-ARM TIMEOUT
<u>B1A37</u>	SECURITY TRANSMITTER SENSOR CIRCUIT LOW
<u>B1A3C</u>	INTERNAL SIREN BATTERY
<u>B1A3D</u>	SIREN BATTERY TAMPER / LOSS OF POWER SUPPLY
<u>B1A3E</u>	SIREN / ITM MISMATCH
<u>B1A3F</u>	ITM ARMING SEQUENCE PERFORMANCE
<u>B2206</u>	CURRENT VIN MISSING/MISMATCH
<u>B222A</u>	VEHICLE LINE MISMATCH
<u>B223C</u>	INTRUSION TRANSCEIVER MODULE INTERNAL
<u>U0010</u>	CAN INTERIOR BUS
<u>U0141</u>	LOST COMMUNICATION WITH IPM (FCM/TIPM)
<u>U0155</u>	LOST COMMUNICATION WITH CLUSTER/CCN
<u>U0169</u>	LOST COMMUNICATION WITH SUNROOF CONTROL MODULE
<u>U0187</u>	LOST COMMUNICATION WITH DVD PLAYER
<u>U110D</u>	LOST COMMUNICATION WITH SECURITY SIREN
<u>U1416</u>	IMPLAUSIBLE SECURITY SIREN SIGNAL RECEIVED

DIAGNOSIS AND TESTING

B1A20-PRE-ARM TIMEOUT

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

- **When Monitored:**

During the Vehicle Theft and Security System (VTSS) pre-arm process.

- **Set Condition:**

If the VTSS pre-arm sequence is interrupted within 16 seconds after securing the vehicle.

Possible Causes
INTERMITTENT PROBLEM WITH FUSED (B+) TO CLUSTER
INTERMITTENT PROBLEM WITH CAN INTERIOR BUS CIRCUITS TO CLUSTER/CCN

Diagnostic Test**1. DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT**

NOTE: Diagnose any related Communication DTCs before continuing.

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read ITM DTCs.

Does the DTC reset?

Yes

- Remove the Cluster/CCN and inspect the Fused B (+) and both CAN Interior Bus circuits for spread terminals, corrosion or intermittent opens.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Test complete. The DTC is not active at this time.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

B1A37-SECURITY TRANSMITTER SENSOR CIRCUIT LOW

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

- **When Monitored:**

When the Vehicle Theft and Security System (VTSS) is armed.

- **Set Condition:**

If the current flow on the sensor signal circuit is above a specified range this Diagnostic Trouble Code (DTC) sets.

Possible Causes
(A645) INTRUSION TRANSMITTER SENSOR SIGNAL CIRCUIT SHORTED TO GROUND

**INTRUSION SENSOR TRANSMITTER
INTRUSION TRANSCEIVER MODULE****Diagnostic Test****1. TEST FOR INTERMITTENT CONDITION**

1. Turn the ignition on.
2. With the scan tool, record and erase DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Close all doors and arm the VTSS and wait two minutes.
5. Disarm the VTSS turn the ignition on.
6. Turn the ignition on and with the scan tool, read DTCs.

Does the scan tool display this DTC as active?

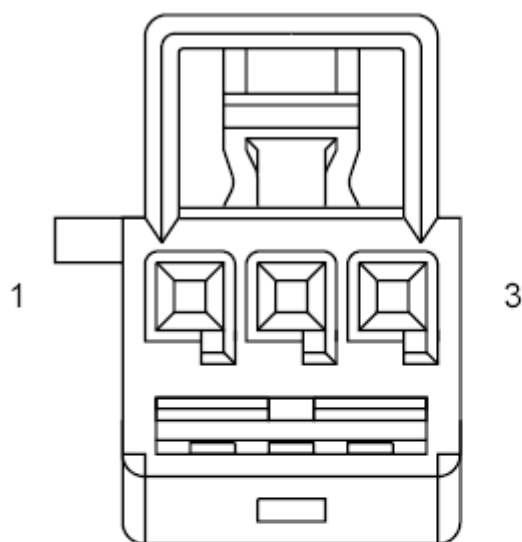
Yes

- Go to step 2

No

- Test complete, the condition or conditions that originally set this DTC are not present at this time. Using the **SYSTEM WIRING DIAGRAMS** as a guide, check all related splices and connectors for signs of water intrusion, corrosion, pushed out or bent terminals, and correct pin tension.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

2. INTRUSION SENSOR TRANSMITTER



TRANSMITTER-
INTRUSION
SENSOR
(VTSS)

295906

Fig. 1: Checking Intrusion Sensor Transmitter Connector
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the Intrusion Sensor Transmitter connector.
3. Turn the ignition on.
4. With the scan tool, erase DTCs.
5. Turn the ignition off and remove the key from the ignition.
6. Close all doors and arm the VTSS and wait two minutes.
7. Disarm the VTSS turn the ignition on.
8. With the scan tool, read DTCs.

Does the scan tool display B1A41-SECURITY TRANSMITTER SENSOR CIRCUIT OPEN?

Yes

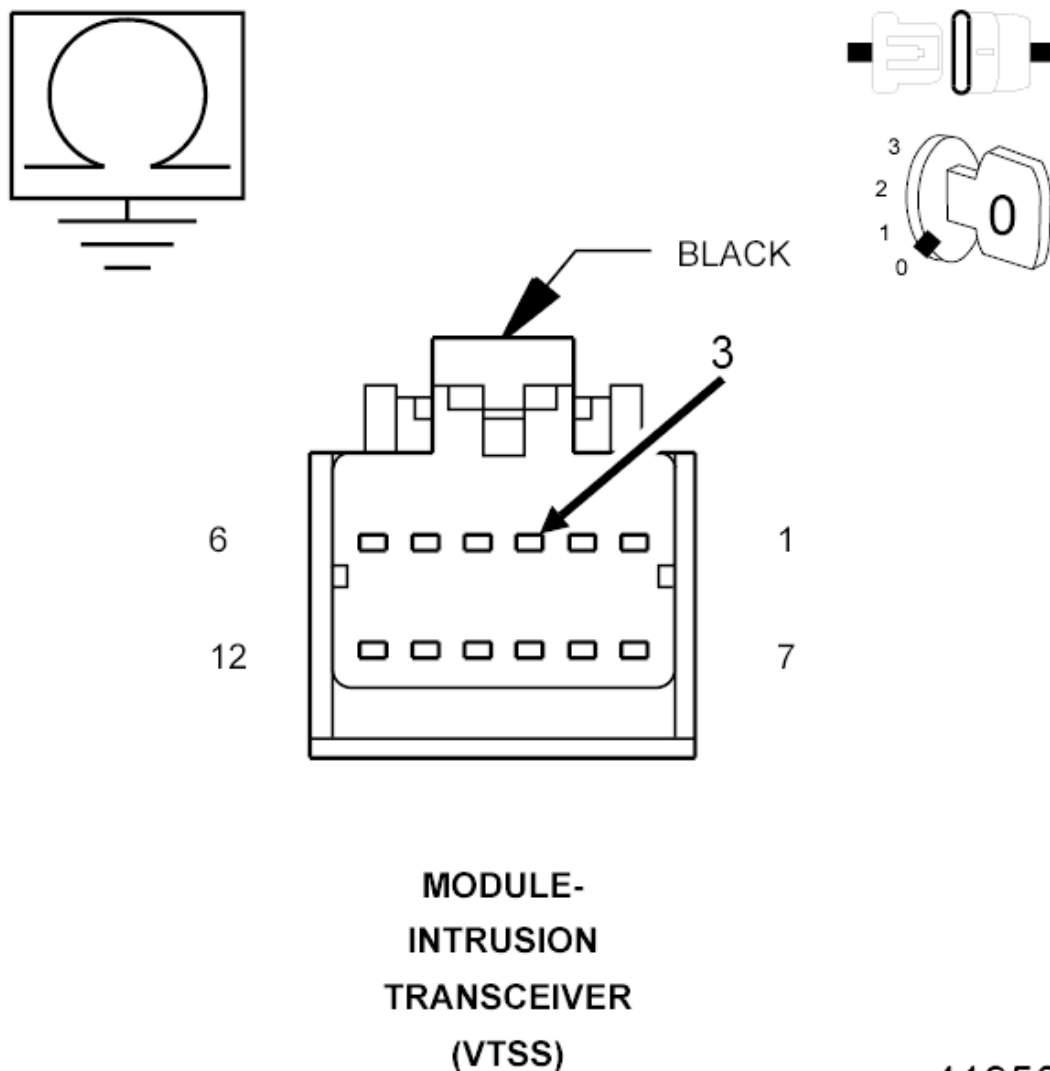
- Replace the Intrusion Sensor Transmitter.

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

No

- Go to step 3

3. **CHECK THE (A645) INTRUSION TRANSMITTER SENSOR SIGNAL CIRCUIT SHORTED TO GROUND**



419509

Fig. 2: Checking Intrusion Transmitter Sensor Signal Circuit Shorted To Ground
Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the Intrusion Transceiver Module connector.

3. Measure the resistance between ground and the (A645) Intrusion Transmitter Sensor Signal circuit at the Intrusion Transceiver Module connector.

Is the resistance below 5.0 Ohms?

Yes

- Repair the short to ground in the (A645) Intrusion Transmitter Sensor Signal circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

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

B1A3C-INTERNAL SIREN BATTERY

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

• **When Monitored:**

Continuously, with the engine over 600 RPM.

• **Set Condition:**

When the internal battery within the Siren does not charge as expected, the Intrusion Transceiver Module (ITM) sets this code.

Possible Causes

VEHICLE STORED WITH NO BATTERY VOLTAGE FOR EXTENDED PERIOD OF TIME
SIREN

Diagnostic Test

1. **DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT**

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Start the engine and allow it to idle for two minutes then turn the engine off.
4. With the scan tool, read DTCs.

Does the DTC reset?

Yes

- Go to step 2

No

- Test complete. The DTC is not active at this time.

2. VEHICLE STORED WITH NO BATTERY VOLTAGE FOR EXTENDED PERIOD OF TIME

NOTE: If the vehicle was allowed to sit with no battery voltage for an extended period of time the back up battery located in the siren may discharge and need to be recharged.

Was the vehicle battery power just restored after the vehicle was stored with no power for an extended period of time?

Yes

- Allow the vehicle to sit with a fully charged battery for two hours then restart this procedure.

No

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

B1A3D-SIREN BATTERY TAMPER / LOSS OF POWER SUPPLY

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

• When Monitored:

Continuously with the Vehicle Theft and Security System (VTSS) armed.

• Set Condition:

If the Intrusion Transceiver Module (ITM) detects incorrect voltage at the Siren this code sets.

Possible Causes
HARNESS TAMPERING / INTERMITTENT CONDITION (A412) FUSED B(+) CIRCUIT (Z901) GROUND OPEN SIREN

Diagnostic Test

1. INSPECT SIREN HARNESS

1. Inspect the wiring harness to the Siren for any signs of tampering or intermittent condition.

Were there any problems found?

Yes

- Repair wiring as necessary.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to step 2

2. DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read DTCs.

Does the DTC reset?

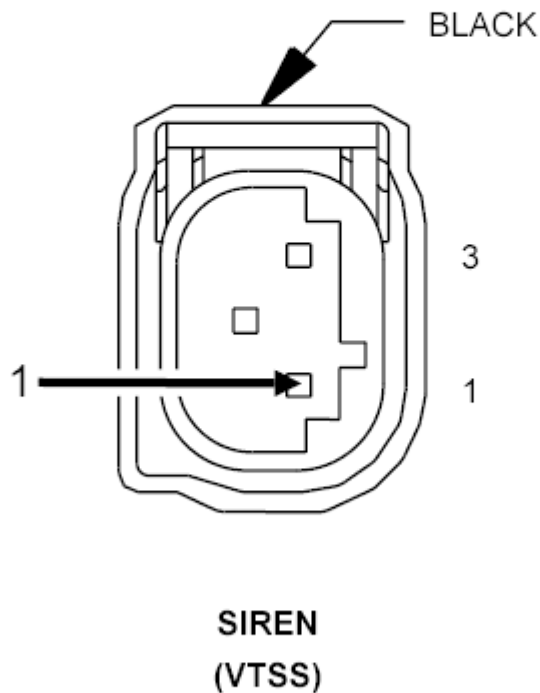
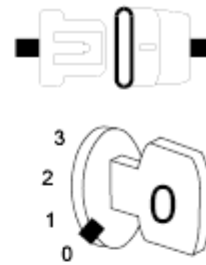
Yes

- Go to step 3

No

- Test complete. The DTC is not active at this time.

3. CHECK THE (A412) FUSED B(+) CIRCUIT AT THE SIREN



419531

Fig. 3: Checking Fused B(+) Circuit At Siren
 Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Disconnect the Siren harness connector.
3. Using a 12-volt test light connected to ground, check the (A412) Fused B(+) circuit at the Siren harness connector.

Does the test light illuminate brightly?

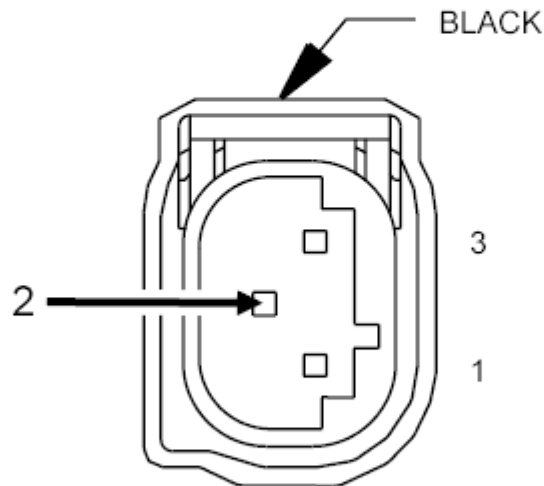
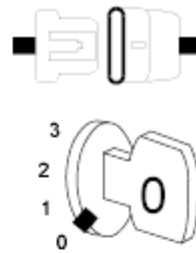
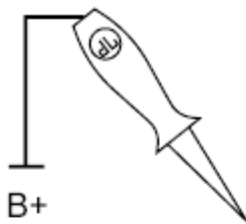
Yes

- Go to step 4

No

- Repair the open in the (A412) Fused B(+) circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

4. CHECK THE (Z901) GROUND CIRCUIT AT THE SIREN



**SIREN
(VTSS)**

Fig. 4: Checking Ground Circuit At Siren
Courtesy of CHRYSLER LLC

1. Using a 12-volt test light connected to 12-volts, check the (Z901) Ground circuit at the Siren harness connector.

Does the test light illuminate brightly?

Yes

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

No

- Repair the open in the (Z901) Ground circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

B1A3E-SIREN / ITM MISMATCH

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

- **When Monitored:**

While the Vehicle Theft and Security System (VTSS) is armed.

- **Set Condition:**

When the learned Siren information stored in the Intrusion Transceiver Module (ITM) does not match.

Possible Causes
SIREN

Diagnostic Test

1. **DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT**

NOTE: Diagnose any related Communication DTCs before continuing.

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one

minute.

5. Disarm the VTSS.
6. With the scan tool, read DTCs.

Does the DTC reset?

Yes

- Inspect the wiring from the ITM to Siren for an intermittent open condition. Check the connector terminals for back out, corrosion or loose terminal contact. If OK, replace the Siren in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to step 2

2. INTERMITTENT CONDITION

1. Check for any of the follow conditions:
 - poor wire to terminal connection
 - corroded terminals
 - backed out or loose terminals
 - broken wire internal to the insulation

Were any problems found?

Yes

- Repair the wiring as necessary.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Test complete. The DTC is not active at this time.

B1A3F-ITM ARMING SEQUENCE PERFORMANCE

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

- **When Monitored:**

During the Vehicle Theft and Security System (VTSS) pre-arm process.

• **Set Condition:**

Intrusion Transceiver Module (ITM) arming process did not complete in a predetermined amount time.

Possible Causes

INTERMITTENT CAN INTERIOR BUS COMMUNICATION
SOFTWARE UPDATE FOR ITM OR TIPM

Diagnostic Test

1. DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT

NOTE: Diagnose any related Communication DTCs before continuing.

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read ITM DTCs.

Does the DTC reset?

Yes

- Check for and correct any CAN Interior Bus DTCs set in the ITM or the Totally Integrated Power Module (TIPM). Also check for related software updates for the ITM and/or TIPM.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Test complete. The DTC is not active at this time.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

B2206-CURRENT VIN MISSING/MISMATCH

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

• **When Monitored:**

Anytime the ignition key is in the ON position.

- **Set Condition:**

The Vehicle Identification Number (VIN) stored in Intrusion Transceiver Module (ITM) does not match the VIN stored in the Cluster/CCN.

Possible Causes
INTRUSION TRANSCEIVER MODULE (ITM) SWAPPED FROM DIFFERENT VEHICLE

Diagnostic Test

1. DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT

1. With a scan tool, read and record DTC.
2. With the scan tool, clear DTC.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read ITM DTC.

Does the DTC reset?

Yes

- Using the scan tool under Miscellaneous functions initialize the Intrusion Transceiver Module.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Test complete. The DTC is not active at this time.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

B222A-VEHICLE LINE MISMATCH

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

- **When Monitored:**

Anytime the ignition key is in the ON position.

- **Set Condition:**

If the Intrusion Transceiver Module (ITM) is not configured.

Possible Causes

INTRUSION TRANSCIVER MODULE CONFIGURATION

Diagnostic Test

1. CONFIGURE THE INTRUSION TRANSCIVER MODULE

1. With the scan tool under miscellaneous functions, perform the initialization procedure for the Intrusion Transceiver Module.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read DTCs.

Does the DTC reset?

Yes

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

No

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

B223C-INTRUSION TRANSCIVER MODULE INTERNAL

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

• **When Monitored:**

Ignition on.

• **Set Condition:**

Internal Intrusion Transceiver Module (ITM) test failed.

Possible Causes

INTRUSION TRANSCIEVER MODULE (ITM)

Diagnostic Test

1. DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.
4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read ITM DTCs.

Does the DTC reset?

Yes

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

No

- Test complete. The DTC is not active at this time.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U0010-CAN INTERIOR BUS

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

- **When Monitored:**

With the ignition on.

- **Set Condition:**

The Totally Integrated Power Module (TIPM) detects the CAN Interior Bus (125K) circuits shorted together.

Possible Causes

(D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO THE (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT
ANY CAN INTERIOR BUS MODULE

TOTALLY INTEGRATED POWER MODULE (TIPM)**Diagnostic Test****1. TEST FOR INTERMITTENT CONDITION**

1. Turn the ignition on.
2. Using the scan tool, record and erase TIPM Diagnostic Trouble Codes (DTCs).
3. Cycle the ignition from on to off three times.
4. Turn the ignition on.
5. With the scan tool, read active TIPM DTCs.

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 the **SYSTEM WIRING DIAGRAMS** 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 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.

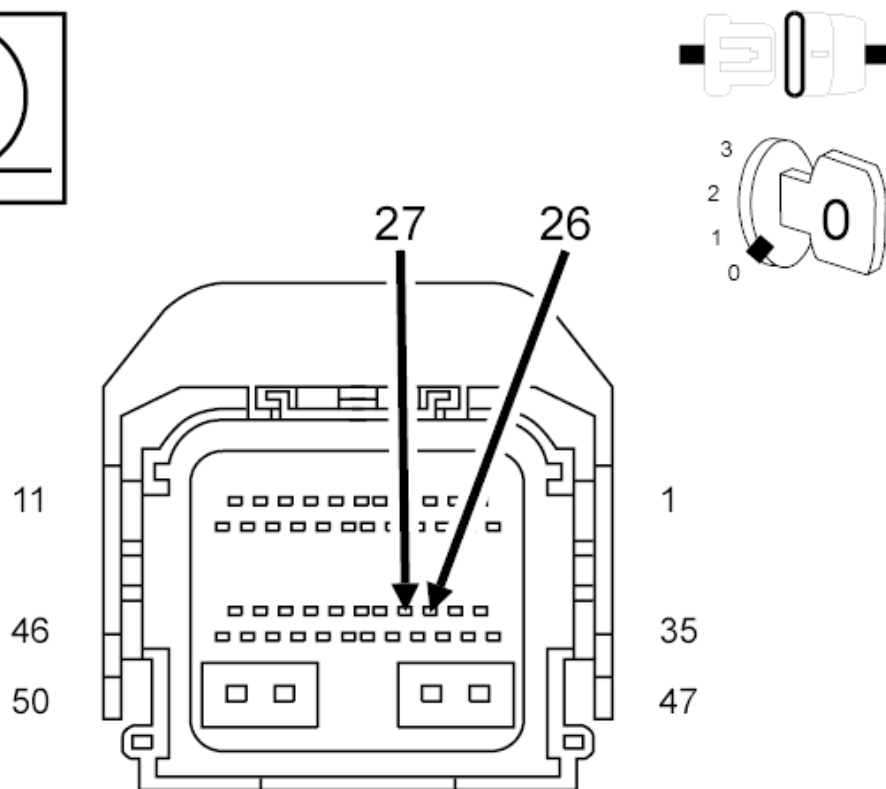
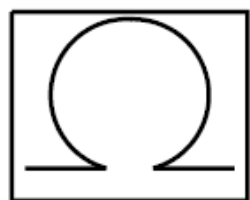
With all the CAN Interior Bus modules disconnected does the scan tool display this DTC as active?

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. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.
3. (D265) CAN INTERIOR BUS (125K) (+) CIRCUIT SHORTED TO THE (D264) CAN INTERIOR BUS (125K) (-) CIRCUIT



MODULE-
TOTALLY
INTEGRATED
POWER C7

420511

Fig. 5: Checking CAN Interior Bus (125K) (+) Circuit Shorted To CAN Interior Bus (125K) (-) Circuit

Courtesy of CHRYSLER LLC

1. Turn the ignition off.
2. Measure the resistance between the (D265) CAN Interior Bus (125K) (+) circuit and the (D264) CAN Interior Bus (125K) (-) circuit at the TIPM C7 harness connector.

Is the resistance below 10K 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. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

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

U0141-LOST COMMUNICATION WITH IPM (FCM/TIPM)

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

Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Diagnosis and Testing** .

U0155-LOST COMMUNICATION WITH CLUSTER/CCN

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

Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Diagnosis and Testing** .

U0169-LOST COMMUNICATION WITH SUNROOF CONTROL MODULE

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

- **When Monitored:**

Continuously when the ignition is 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 Sunroof Control Module for approximately two to five seconds.

Possible Causes

CAN BUS CIRCUITS OPEN OR SHORTED
 DTCS RELATED TO BATTERY VOLTAGE, IGNITION, OR VIN MESSAGES
 SUNROOF CONTROL MODULES POWER AND GROUND
 TIPM NOT CONFIGURED CORRECTLY
 SUNROOF CONTROL MODULE
 MODULE THAT SET THIS DTC

Diagnostic Test

1. VERIFY DTC IS ACTIVE

NOTE: Make sure the IOD fuse is installed and the battery is fully charged before proceeding.

1. Turn the ignition on.
2. With the scan tool, read active DTCs.

Is this DTC active?

Yes

- Refer to DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Diagnosis and Testing and perform the U0169-LOST COMMUNICATION WITH SUNROOF CONTROL MODULE diagnostic procedure.

No

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

U0187-LOST COMMUNICATION WITH DVD PLAYER

For complete wiring diagrams, refer to SYSTEM WIRING DIAGRAMS .

Refer to DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Diagnosis and Testing .

U110D-LOST COMMUNICATION WITH SECURITY SIREN

For complete wiring diagrams, refer to SYSTEM WIRING DIAGRAMS .

- **When Monitored:**

Continuously while the Vehicle Theft and Security System (VTSS) is armed.

- **Set Condition:**

If the Intrusion Transceiver Module (ITM) does not receive messages from the Siren.

Possible Causes
(A412) FUSED B+ CIRCUIT OPEN
(Z901) GROUND CIRCUIT OPEN
(D96) SIREN SIGNAL CONTROL CIRCUIT SHORTED TO BATTERY
(D96) SIREN SIGNAL CONTROL CIRCUIT OPEN
(D96) SIREN SIGNAL CONTROL CIRCUIT SHORTED TO GROUND
SIREN
INTRUSION TRANSCEIVER MODULE (ITM)

Diagnostic Test

1. INTERMITTENT DTC

1. With the scan tool, erase the current Intrusion Transceiver Module DTCs.
2. Turn the ignition off.
3. Arm the VTSS and wait one minute.
4. Disarm the VTSS and turn the ignition on.

Does the scan tool display the same DTC?

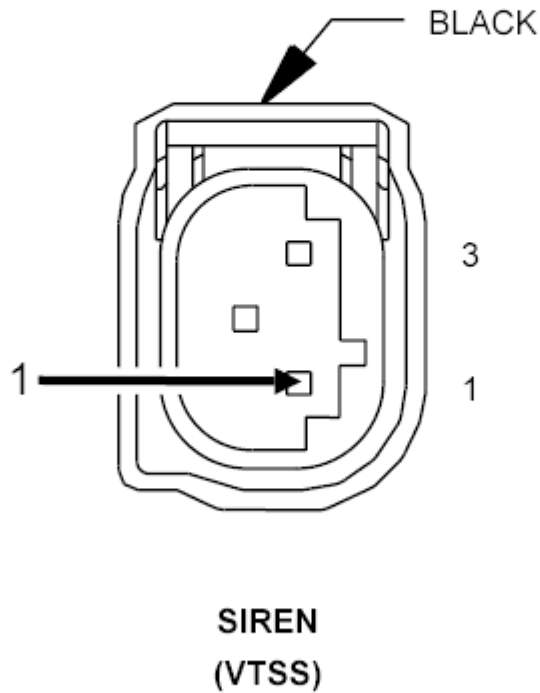
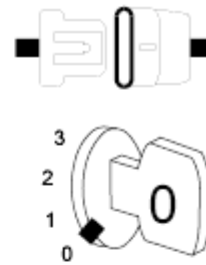
Yes

- Go to step 2

No

- Test complete, the condition or conditions that originally set this DTC are not present at this time. Using the **SYSTEM WIRING DIAGRAMS** as a guide, check all related splices and connectors for signs of water intrusion, corrosion, pushed out or bent terminals, and correct pin tension.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

2. (A412) FUSED B+ OPEN



419531

Fig. 6: Checking Fused B(+) Circuit At Siren
 Courtesy of CHRYSLER LLC

1. Gain access to the VTSS Siren.
2. Disconnect the Siren harness connector.
3. Using a 12-volt test light connected to ground, check the (A412) Fused B+ circuit in the Siren harness connector.

Does the test light illuminate brightly?

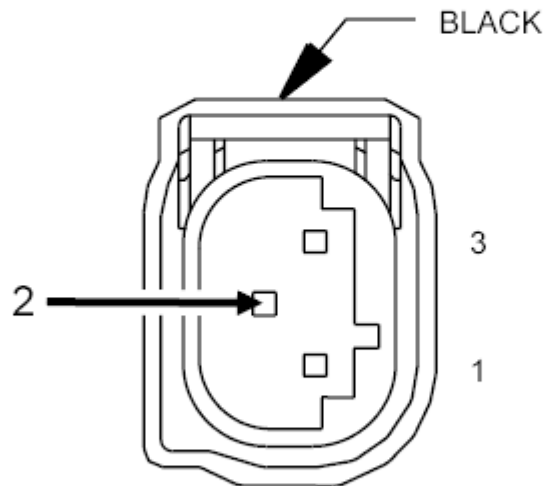
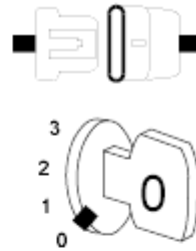
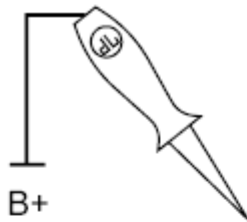
Yes

- Go to step 3

No

- Repair the open in the (A412) Fused B+ circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

3. (Z901) GROUND CIRCUIT OPEN



**SIREN
(VTSS)**

Fig. 7: Checking Ground Circuit At Siren**Courtesy of CHRYSLER LLC**

1. Using a 12-volt test light connected to 12-volts, check the (Z901) Ground circuit at the Siren harness connector.

Does the test light illuminate brightly?

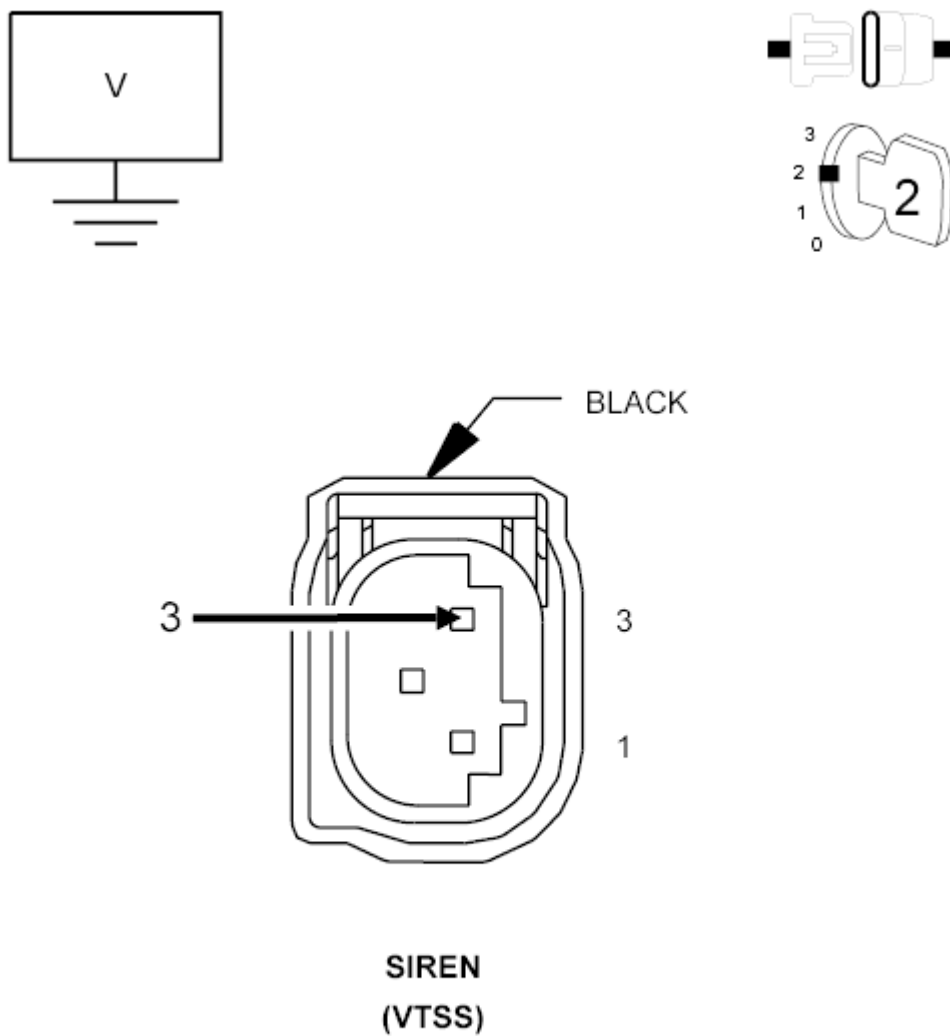
Yes

- Go to step 4

No

- Repair the open in the (Z901) Ground circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

4. **(D96) SIREN SIGNAL CONTROL CIRCUIT SHORTED TO BATTERY**



419571

Fig. 8: Checking Siren Signal Control Circuit Shorted To Battery
Courtesy of CHRYSLER LLC

1. Measure the voltage of the (D96) Siren Signal Control circuit.

Is there any voltage present?

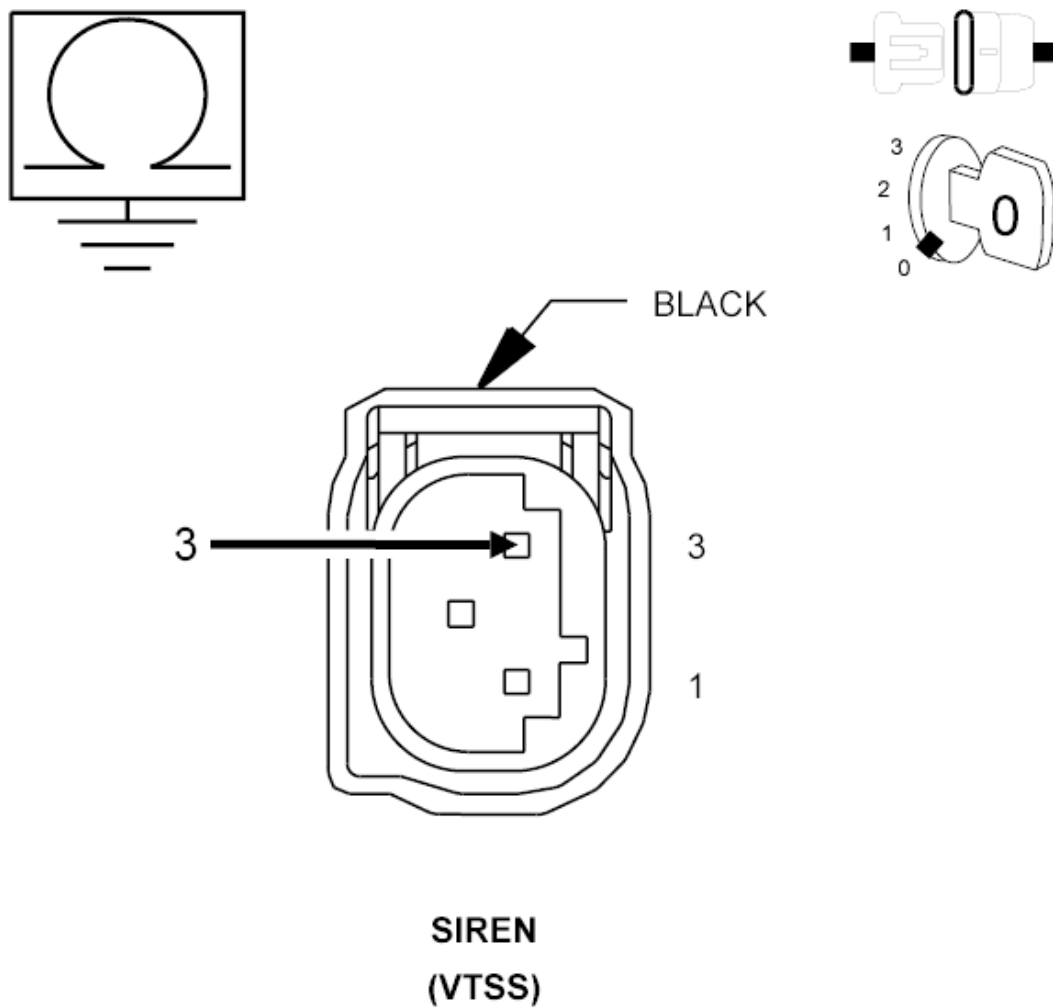
Yes

- Repair the short to voltage in the (D96) Siren Signal Control circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to step 5

5. (D96) SIREN SIGNAL CONTROL CIRCUIT SHORTED TO GROUND



419573

Fig. 9: Checking Siren Signal Control Circuit Shorted To Ground
Courtesy of CHRYSLER LLC

1. Disconnect the Intrusion Transceiver Module harness connector.
2. Measure the resistance between ground and the (D96) Siren Signal Control circuit.

Is the resistance above 5.0 ohms?

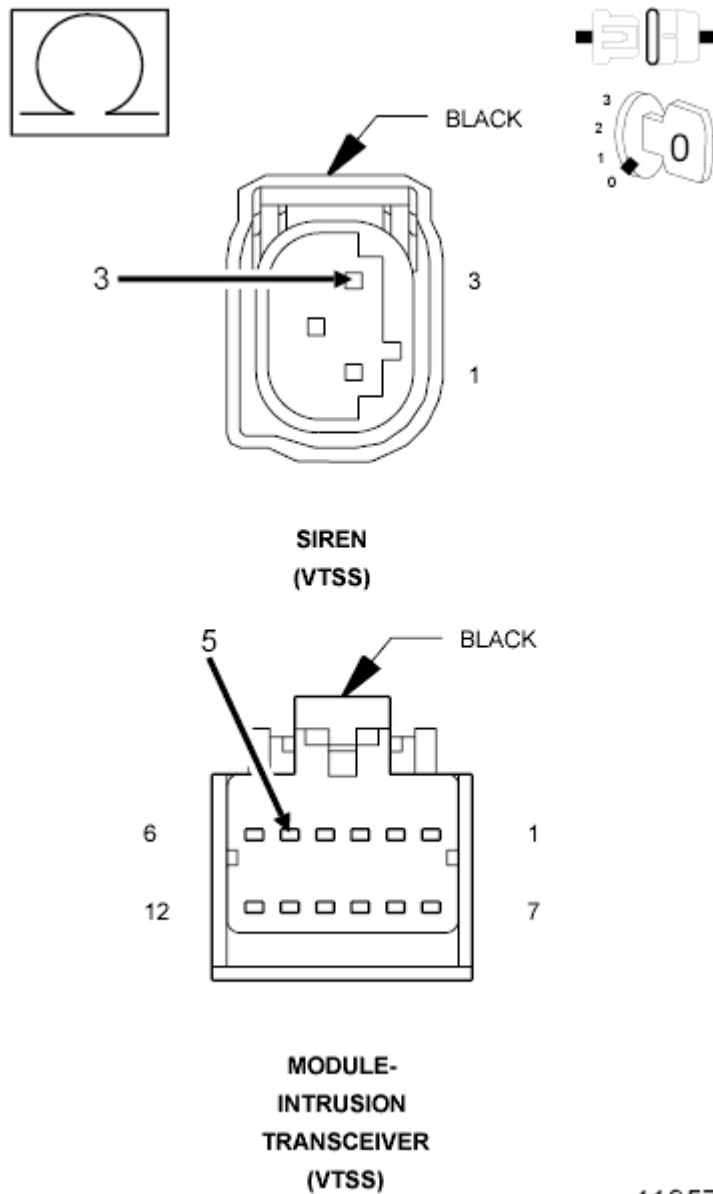
Yes

- Go to step 6

No

- Repair the short to ground in the (D96) Siren Signal Control circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure**.

6. (D96) SIREN SIGNAL CONTROL CIRCUIT OPEN



419575

Fig. 10: Checking Siren Signal Control Circuit Open
 Courtesy of CHRYSLER LLC

1. Measure the resistance of the (D96) Siren Signal Control circuit between the Intrusion Transceiver Module and the Siren harness connector.

Is the resistance below 5.0 ohms?

Yes

- Connect a known good Siren and try to reset the DTC. If the DTC does not reset, the original Siren needs to be replaced. If the DTC does reset, replace the Intrusion Transceiver Module in accordance with the Service Information.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Repair the open in the (D96) Siren Signal Control circuit.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

U1416-IMPLAUSIBLE SECURITY SIREN SIGNAL RECEIVED

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

- **When Monitored:**

While the Vehicle Theft and Security System (VTSS) is armed.

- **Set Condition:**

When the learned Siren information stored in the Intrusion Transceiver Module (ITM) does not match.

Possible Causes
INTERMITTENT CONDITION SIREN

Diagnostic Test

1. DETERMINE IF DIAGNOSTIC TROUBLE CODE (DTC) IS CURRENT

NOTE: Diagnose any related Communication DTCs before continuing.

1. With a scan tool, read and record DTCs.
2. With the scan tool, clear DTCs.
3. Turn the ignition off and remove the key from the ignition.

4. Lock and close all doors to allow the VTSS to go from pre-arm to armed status and wait one minute.
5. Disarm the VTSS.
6. With the scan tool, read ITM DTCs.

Does the DTC reset?

Yes

- Inspect wiring from ITM to Siren for an intermittent open condition. Check connector terminals for push out, corrosion or loose terminal contact. If OK, replace the Siren.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Go to step 2

2. INTERMITTENT CONDITION

1. Check for any of the follow conditions:
 - poor wire to terminal connection
 - corroded terminals
 - pushed out or loose terminals
 - broken wire internal to the insulation

Were any problems found?

Yes

- Repair the wiring as necessary.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .

No

- Test complete. The DTC is not active at this time.
- Perform the BODY VERIFICATION TEST. Refer to **DTC-Based Diagnostics/MODULE, Totally Integrated Power (TIPM) - Standard Procedure** .