

## DIAGNOSIS AND TESTING > COMMUNICATIONS NETWORK > PINPOINT TESTS > PINPOINT TEST P : THE RTM (RADIO TRANSCEIVER MODULE) DOES NOT RESPOND TO THE DIAGNOSTIC SCAN TOOL

Refer to Module Communications Network for schematic and connector information.

Refer to Tire Pressure Monitor System for schematic and connector information.

### Normal Operation and Fault Conditions

The RTM communicates with the diagnostic scan tool through the MS-CAN. Diagnostic messages are sent/received between the DLC and the diagnostic scan tool through the HS-CAN2 circuits at the DLC, and are translated through the GWM to the MS-CAN.

### Possible Sources

- Fuse
- Wiring, terminals and connector
- RTM

### Visual Inspection and Diagnostic Pre-checks

Verify BCM fuse 32 (10A) is OK.

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P1 CHECK THE RTM (RADIO TRANSCEIVER MODULE) VOLTAGE SUPPLY CIRCUIT FOR AN OPEN

Ignition OFF.

Disconnect: RTM C9026

Ignition ON.

Measure:

| Positive Lead | Measurement / Action                                                                | Negative Lead |
|---------------|-------------------------------------------------------------------------------------|---------------|
| C9026-6       |  | Ground        |

Is the voltage greater than 11 volts?

|     |          |
|-----|----------|
| Yes | GO to P2 |
|-----|----------|

|           |                                                                                                                                                                  |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>No</b> | VERIFY the BCM fuse 32 (10A) is OK. If OK, REPAIR the circuit. If not OK, REFER to the OEM WIRING DIAGRAMS to identify the possible causes of the circuit short. |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## P2 CHECK THE RTM (RADIO TRANSCEIVER MODULE) GROUND CIRCUIT FOR AN OPEN

Ignition OFF.

Measure:

| Positive Lead | Measurement / Action | Negative Lead |
|---------------|----------------------|---------------|
| C9026-1       | $\Omega$             | Ground        |

**Is the resistance less than 3 ohms?**

|            |                     |
|------------|---------------------|
| <b>Yes</b> | GO to P3            |
| <b>No</b>  | REPAIR the circuit. |

## P3 CHECK THE MS-CAN (MEDIUM SPEED-CONTROLLER AREA NETWORK) CIRCUITS BETWEEN THE RTM (RADIO TRANSCEIVER MODULE) AND THE GWM (GATEWAY MODULE A) FOR AN OPEN

Disconnect: GWM C2431

Measure:

| Positive Lead | Measurement / Action | Negative Lead |
|---------------|----------------------|---------------|
| C9026-4       | $\Omega$             | C2431-23      |
| C9026-3       | $\Omega$             | C2431-22      |

**Are the resistances less than 3 ohms?**

|            |                                 |
|------------|---------------------------------|
| <b>Yes</b> | GO to P4                        |
| <b>No</b>  | REPAIR the circuit in question. |

## P4 CHECK FOR CORRECT RTM (RADIO TRANSCEIVER MODULE) OPERATION

Ignition OFF.

Disconnect and inspect all the RTM connectors and related in-line connectors.

Repair:

corrosion (install new connector or terminals - clean module pins)