

DTC B1370

Circuit Description

The remote control door lock receiver (RCDLR) provides an high side drive output for the ignition 1 voltage circuit. The ignition 1 voltage circuit controls the Run/Crank relay when the backup power mode is enabled.

DTC Descriptors

This diagnostic procedure supports the following DTC: DTC B1370 Device Ignition 1 (ON and START) Circuit

Conditions for Running the DTC

Voltage supplied to the module is in the normal operating voltage range of 9–16 volts.

Conditions for Setting the DTC

- a) The RCDLR detects a short to ground in the ignition 1 voltage circuit when the output is active.
- b) The RCDLR detects a short to battery or an open in the ignition 1 voltage circuit when the output is inactive.
- c) Any of the condition above must be present for more than 0.375 seconds.

Action Taken When the DTC Sets

The RCDLR disables the output for the current ignition cycle when a short to ground is detected.

Conditions for Clearing the DTC

- a) A current DTC clears when the malfunction is no longer present.
- b) A history DTC clears when the module ignition cycle counter reaches the reset threshold, without a repeat of the malfunction.

DTC B1370

| Step | Action | Values | Yes | No |
|--|---|--------|--------------|---|
| Schematic Reference: Power Distribution Schematics on page 8-34 in Wiring Systems Connector End View Reference: Master Electrical Component List on page 8-62 in Wiring Systems | | | | |
| 1 | Did you perform the Diagnostic System Check -Vehicle? | — | Go to Step 2 | Go to Diagnostic System Check - Vehicle on page 10-1 in Vehicle DTC Information |
| 2 | 1. Turn OFF the ignition. 2. Disconnect the run/crank relay. 3. Connect a test lamp across the coil cavities of the run/crank relay. 4. Turn ON the ignition, with the engine OFF. 5. Retrieve DTCs from RCDLR. Is the code still set as current? | — | Go to Step 3 | Go to Step 13 |
| 3 | 1. Turn OFF the ignition. 2. Reconnect the run/crank relay. 3. Disconnect the BCM. 4. Disconnect the ignition 1 voltage circuit at the cavity C4–C8 of the BCM. 5. Reconnect the BCM. 6. Turn ON the ignition, with the engine OFF. 7. Retrieve DTCs from RCDLR. Is the code still set as current? | — | Go to Step 4 | Go to Step 8 |

| Step | Action | Values | Yes | No |
|------|---|--------|---------------|--------------|
| 4 | 1. Command the Run/Crank relay OFF, from the RCDLRs output controls under Computer/Integrating Systems menu on the scan tool. 2. Measure the voltage between the ignition 1 voltage circuit at the BCM connector and a good ground. Is the voltage measured within the specified range? | B+ | Go to Step 6 | Go to Step 5 |
| 5 | 1. Command the Run/Crank relay ON, from the RCDLRs output controls under Computer/Integrating Systems menu on the scan tool. 2. Measure the voltage between the ignition 1 voltage circuit at the BCM connector and a good ground. Is the voltage measured within the specified range? | B+ | Go to Step 9 | Go to Step 7 |
| 6 | 1. Disconnect the RCDLR. 2. Test the ignition 1 voltage circuit for a short to voltage. Refer to Circuit Testing on page 8-9 and Wiring Repairs on page 8-15 in Wiring Systems. Did you find and correct the condition? | — | Go to Step 14 | Go to Step 9 |
| 7 | 1. Disconnect the RCDLR. 2. Test the ignition 1 voltage circuit for an open or short to ground. Refer to Circuit Testing on page 8-9 and Wiring Repairs on page 8-15 in Wiring Systems. Did you find and correct the condition? | — | Go to Step 14 | Go to Step 9 |

| Step | Action | Values | Yes | No |
|------|--|--------|---------------|---------------|
| 8 | Test the ignition 1 voltage circuit between C3–B5 and C4–D3 connectors of the BCM for a short to ground or short to voltage. Refer to Circuit Testing on page 8-9 and Wiring Repairs on page 8-15 in Wiring Systems. Did you find and correct the condition? | — | Go to Step 14 | Go to Step 11 |
| 9 | Inspect for poor connections and terminal tension at the harness connector of the RCDLR module. Refer to Testing for Intermittent and Poor Connections on page 8-13 in Wiring Systems. Did you find and correct the condition? | — | Go to Step 14 | Go to Step 10 |
| 10 | Important: Perform the module setup procedure if required. Replace the RCDLR module. Refer to Remote Control Door Lock Receiver Replacement on page 11-20 in Keyless Entry for the appropriate repair instructions. Did you complete the replacement? | — | Go to Step 14 | — |
| 11 | Inspect for poor connections and terminal tension at the harness connector of the BCM. Refer to Testing for Intermittent and Poor Connections on page 8-13 in Wiring Systems. Did you find and correct the condition? | — | Go to Step 14 | Go to Step 12 |

| Step | Action | Values | Yes | No |
|------|---|--------|---------------|-----------|
| 12 | Important: Perform the module setup procedure if required. Replace the BCM. Refer to Body Control Module Replacement on page 10-73 for the appropriate repair instructions. Did you complete the replacement? | — | Go to Step 14 | |
| 13 | Replace the run/crank relay. Did you complete the replacement? | — | Go to Step 14 | — |
| 14 | 1. Reconnect all components. 2. Use the scan tool in order to clear the DTC. 3. Operate the vehicle within the Conditions for Running the DTC as specified in the supporting text. Does the DTC reset? | — | Go to Step 2 | System OK |

LAUNCH