

# Your Ultimate Source for OEM Repair Manuals

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2001 CHEVROLET Cavalier OEM Service and Repair Workshop Manual

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The head-up display switch is a multiplexed switch that controls the head-up display based on driver inputs. The head-up display provides the switch with a low reference and monitors a signal circuit. The head-up display switch is made up of a resistor ladder and three switches: Dim +/-, Up/Down, and Page. When a switch is pressed, the signal voltage is pulled low through the resistor ladder. When pressed, each of the switches will result in a different signal voltage seen by the head-up display, depending on the switch's location on the resistor ladder.

# **Conditions for Running the DTC**

Ignition ON/Vehicle in Service Mode.

#### **Conditions for Setting the DTC**

#### B361B 02

The head-up display switch signal voltage is less than 1 V

#### B361B 05

The head-up display switch signal voltage is greater than 11.5 V

#### B361B 59

The head-up display switch is stuck

#### **Action Taken When the DTC Sets**

The head-up display ignores the head-up display switch inputs

# **Conditions for Clearing the DTC**

The DTC will become history if the head-up display no longer detects a malfunction

#### **Reference Information**

#### **Schematic Reference**

**Head-Up Display Schematics** 

#### **Connector End View Reference**

Master Electrical Component List

#### **Description and Operation**

Instrument Cluster Description and Operation

Circuit/System Verification must be performed before proceeding with Circuit/System Testing.

- 1. Ignition OFF/Vehicle OFF and all vehicle systems OFF, disconnect the harness connector at the S27 Head-Up Display Switch. It may take up to 2 min for all vehicle systems to power down.
- 2. Test for less than 10  $\Omega$  between the low reference circuit terminal 3 and ground.
  - If 10  $\Omega$  or greater
  - 1. Ignition OFF/Vehicle OFF, disconnect the harness connector at the P29 Head-Up Display.
  - 2. Test for less than 2  $\Omega$  in the low reference circuit end to end.
    - If  $2\Omega$  or greater, repair the open/high resistance in the circuit.
    - If less than 2  $\Omega$ , replace the P29 Head-Up Display.
  - If less than 10  $\Omega$
- 3. Test for 4.8–5.2 V between the signal circuit terminal 4 and ground.
  - If less than 4.8 V
  - 1. Ignition OFF/Vehicle OFF, disconnect the harness connector at the P29 Head-Up Display.
  - 2. Test for infinite resistance between the signal circuit and ground.
    - If less than infinite resistance, repair the short to ground on the circuit.
    - If infinite resistance
  - 3. Test for less than 2  $\Omega$  in the signal circuit end to end.
    - If 2  $\Omega$  or greater, repair the open/high resistance in the circuit.
    - If less than 2  $\Omega$ , replace the P29 Head-Up Display.
  - If greater than 5.2 V
  - 1. Ignition OFF/Vehicle OFF, disconnect the harness connector at the P29 Head-Up Display, ignition ON.
  - 2. Test for less than 1 V between the signal circuit and ground.
    - If 1 V or greater, repair the short to voltage on the circuit.
    - If less than 1 V, replace the P29 Head-Up Display.
  - If between 4.8-5.2 V
- 4. Test or replace the S27 Head-Up Display switch.

Replace the S27 Head-Up Display Switch.

- $\circ$  If between 1.7K 2.1K  $\Omega$
- 8. All OK.

# **Repair Instructions**

Perform the Diagnostic Repair Verification after completing the repair.

- Displays and Gauges Component Replacement Reference
- Control Module References for control module replacement, programming and setup



#### **Conditions for Running the DTC**

Ignition On

# **Conditions for Setting the DTC**

The internal fault detection is handled inside the control module. No external circuit diagnosis is involved.

#### **Actions Taken When the DTC Sets**

DTCs listed in the DTC Descriptor category=Type B DTC

# **Conditions for Clearing the DTC**

DTCs listed in the DTC Descriptor category=Type B DTC

# **Diagnostic Aids**

DTC P0070 is set in case the battery was disconnected or the control module was re-programmed.

#### **Reference Information**

# **Schematic Reference**

**Instrument Cluster Schematics** 

# **Connector End View Reference**

Master Electrical Component List

# **Description and Operation**

Instrument Cluster Description and Operation

#### **Electrical Information Reference**

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs

# **DTC Type Reference**

Powertrain Diagnostic Trouble Code (DTC) Type Definitions