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2003 CHEVROLET Aveo/Kalos 5 doors OEM Service and Repair Workshop Manual

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Circuit/System Testing

1. Ignition/Vehicle & All vehicle systems » Off
2. Remove the component:KR171 Engine Control Module Wake-Up Relay@X50A Fuse Block - Underhood
3. Ignition » On / Vehicle » In Service Mode
4. Verify a test lamp turns On between the test points:
   - B+ circuit terminal 86&Ground
   - B+ circuit terminal 87&Ground
   - **If the test lamp does not turn On**

     Replace the component:X50A Fuse Block - Underhood
   - **If the test lamp turns On**
5. Ignition/Vehicle » Off & Remove » Test lamp
6. Connect a 3 A fused jumper wire between the test points:Ignition circuit terminal 30&B+ circuit terminal 87
7. Connect a test lamp between the test points:Control circuit terminal 85&B+ circuit terminal 86
8. Ignition » On / Vehicle » In Service Mode
9. Clear the DTCs.
10. Perform the scan tool control function:Ignition On/Start Switch Circuit »On and Off

    Verify the test lamp turns On and Off.
    - **If the test lamp is always Off**

      1. Ignition/Vehicle » Off & Remove » Test lamp
      2. Disconnect the appropriate electrical connector:K20 Engine Control Module
      3. Ignition » On / Vehicle » In Service Mode
      4. Test for less than 1 V between the test points:Control circuit terminal 85@Relay Socket&Ground
         - If 1 V or greater » Repair the short to voltage on the circuit.
         - If less than 1 V
      5. Ignition/Vehicle » Off

Replace the component:KR171 Engine Control Module Wake-Up Relay

- **If infinite resistance**

5. Connect a 3 A fused jumper wire between the test points:Component terminal 86&B+

   Connect a jumper wire between the test points:Component terminal 85&Ground

6. Test for less than 2 Ω between the test points:Component terminal 30&87

   - **If 2 Ω or greater**

     Replace the component:KR171 Engine Control Module Wake-Up Relay

   - **If less than 2 Ω**

7. All OK.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the repair: Diagnostic Repair Verification

- Underhood Electrical Center or Junction Block Replacement—X50A Fuse Block - Underhood
- Electrical Relay Replacement—KR171 Engine Control Module Wake-Up Relay
- For control module replacement, programming, and setup refer to: Control Module References

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Low Control Cylinder 1	P0261	P0201	P0262	P1248
High Control Cylinder 1	P2147	P0201	P2148	P1248
Low Control Cylinder 2	P0264	P0202	P0265	P1249
High Control Cylinder 2	P2150	P0202	P2151	P1249
Low Control Cylinder 3	P0267	P0203	P0268	P124A
High Control Cylinder 3	P2153	P0203	P2154	P124A
Low Control Cylinder 4	P0270	P0204	P0271	P124B
High Control Cylinder 4	P2156	P0204	P2157	P124B
Low Control Cylinder 5	P0273	P0205	P0274	P124C
High Control Cylinder 5	P216B	P0205	P216C	P124C
Low Control Cylinder 6	P0276	P0206	P0277	P124D
High Control Cylinder 6	P216E	P0206	P216F	P124D
Low Control Cylinder 7	P0279	P0207	P0280	P124E
High Control Cylinder 7	P217B	P0207	P217C	P124E
Low Control Cylinder 8	P0282	P0208	P0283	P124F
High Control Cylinder	P217E	P0208	P217F	P124F

- Performing the fuel injector coil test may help isolate an intermittent condition. Refer to Fuel Injector Diagnosis.
- If the condition is intermittent, move the related harnesses and connectors, with the engine operating, while monitoring the scan tool Injector Control Circuit Status parameters. An Injector Control Circuit Status parameter will change from OK or Not Run to Malfunction if there is a condition with the circuit or a connection.

Reference Information

Schematic Reference

Engine Controls Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

Fuel System Description

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

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

1. Ignition ON.
2. Verify DTC P062B is not set.
    - **If the DTC is set**

      Refer to Diagnostic Trouble Code (DTC) List - Vehicle
    - **If the DTC is not set**