

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2014 Chevrolet Spark Classic Service and Repair Manual

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1. Ignition OFF, disconnect the inline harness connector at the appropriate A9 Outside Rearview Mirror.
Ignition ON
2. Connect a test lamp between the control circuit terminal 4 and control circuit terminal 18.
3. Verify the test lamp turns ON when commanding the FOLD and UNFOLD states with the S52 Outside Rearview Mirror Switch.
 - **If the test lamp remains OFF during either of the commands**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the S52 Outside Rearview Mirror Switch.
 2. Test for infinite resistance between each control 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 Ω in each control circuit end to end.
 - If 2 Ω or greater, repair the open/high resistance in the circuit.
 - If less than 2 Ω , test or replace the S52 Outside Rearview Mirror Switch.
 - **If the test lamp is always ON**
 1. Ignition OFF, remove the test lamp, disconnect the harness connector at the S52 Outside Rearview Mirror Switch, ignition ON.
 2. Test for less than 1 V between each control circuit and ground.
 - If 1 V or greater, repair the short to voltage on the circuit.
 - If less than 1 V, test or replace the S52 Outside Rearview Mirror Switch
 - **If the test lamp turns ON during each of the commands**
4. Test or replace the A9 Outside Rearview Mirror.

Repair Instructions

Perform the [Diagnostic Repair Verification](#) after completing the repair.

- [Outside Rearview Mirror Remote Control Switch Replacement](#)
- [Outside Rearview Mirror Replacement](#)

- **If the test lamp does not turn On and Off**

7. Ignition/Vehicle » Off

8. Disconnect the electrical connector:X6@K9 Body Control Module

9. Disconnect the electrical connector:X1@X51R Fuse Block - Instrument Panel Right

10. Test for less than 2 Ω between the test points:

- Control circuit terminal 8@A23D Door Latch Assembly - Driver&Control circuit terminal 4 X6@Control module harness
- Control circuit terminal 8@A23LR Door Latch Assembly - Left Rear&Control circuit terminal 4 X6@Control module harness
- Control circuit terminal 8@A23P Door Latch Assembly - Passenger&Control circuit terminal 4 X6@Control module harness
- Control circuit terminal 8@A23RR Door Latch Assembly - Right Rear&Control circuit terminal 4 X6@Control module harness
- Control circuit terminal 10@A23P Door Latch Assembly - Passenger&Control circuit terminal 30 X1@Fuse/Junction Block Harness
- Control circuit terminal 10@A23RR Door Latch Assembly - Right Rear&Control circuit terminal 30 X1@Fuse/Junction Block Harness
- Control circuit terminal 6@A23D Door Latch Assembly - Driver&Control circuit terminal 30 X1@Fuse/Junction Block Harness
- Control circuit terminal 6@A23LR Door Latch Assembly - Left Rear&Control circuit terminal 30 X1@Fuse/Junction Block Harness
- **If 2 Ω or greater**
Repair the open/high resistance in the circuit.
- **If less than 2 Ω**

11. Test or replace the component:K9 Body Control Module

Test 2

1. NOTE

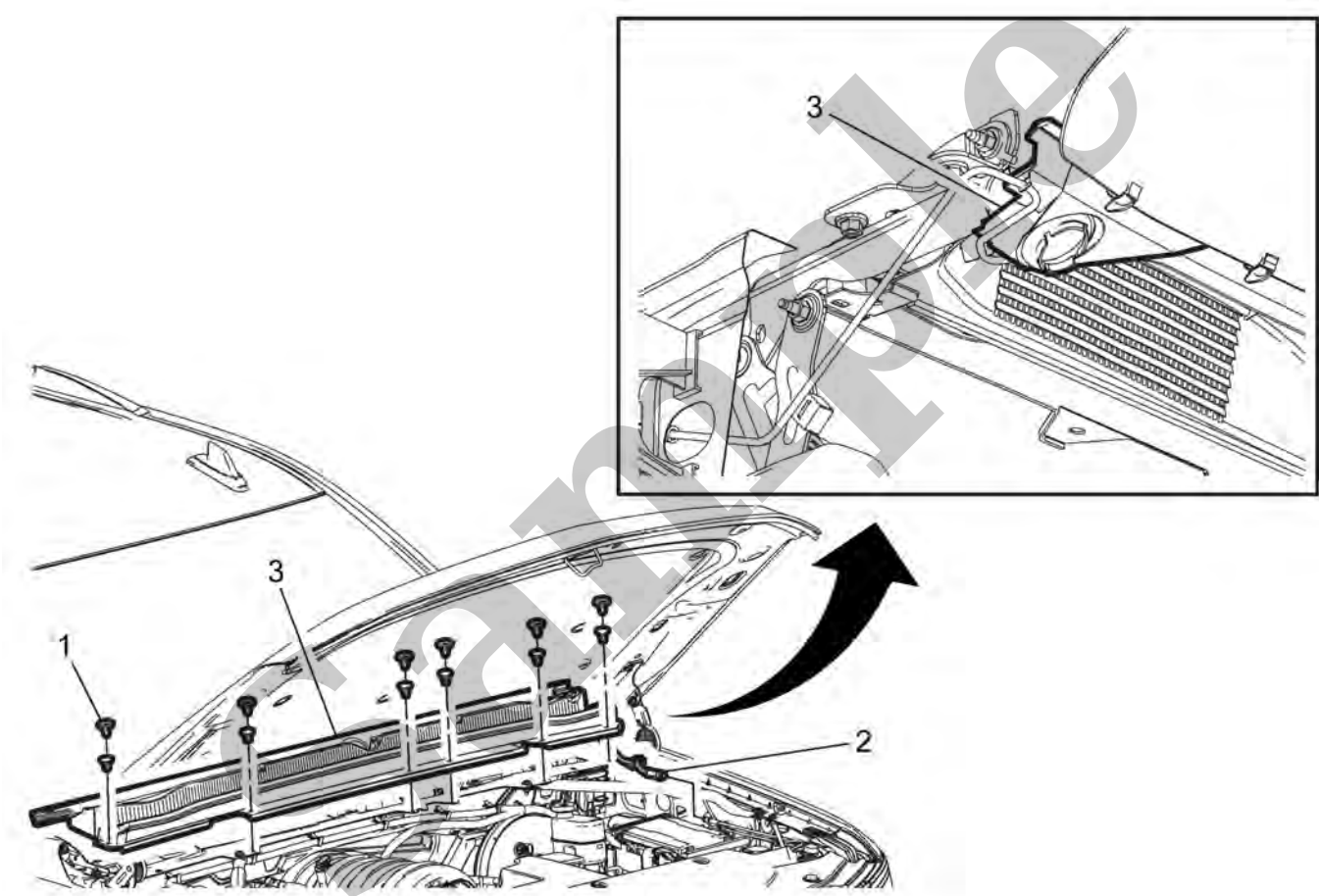
Note

Callout	Component Name
	CAUTION Caution Refer to Fastener Caution. Tighten 25 N·m (18 lb ft)
2	Front Side Door Lock Striker Procedure Ensure the alignment of the striker. Refer to Front Side Door Lock Striker Adjustment. NOTE Note Inspect the door for proper operation.

YOUR CURRENT VEHICLE

Air Inlet Grille Panel Replacement

Air Inlet Grille Panel Replacement (Chevrolet/GMC)



Air Inlet Grille Panel Replacement

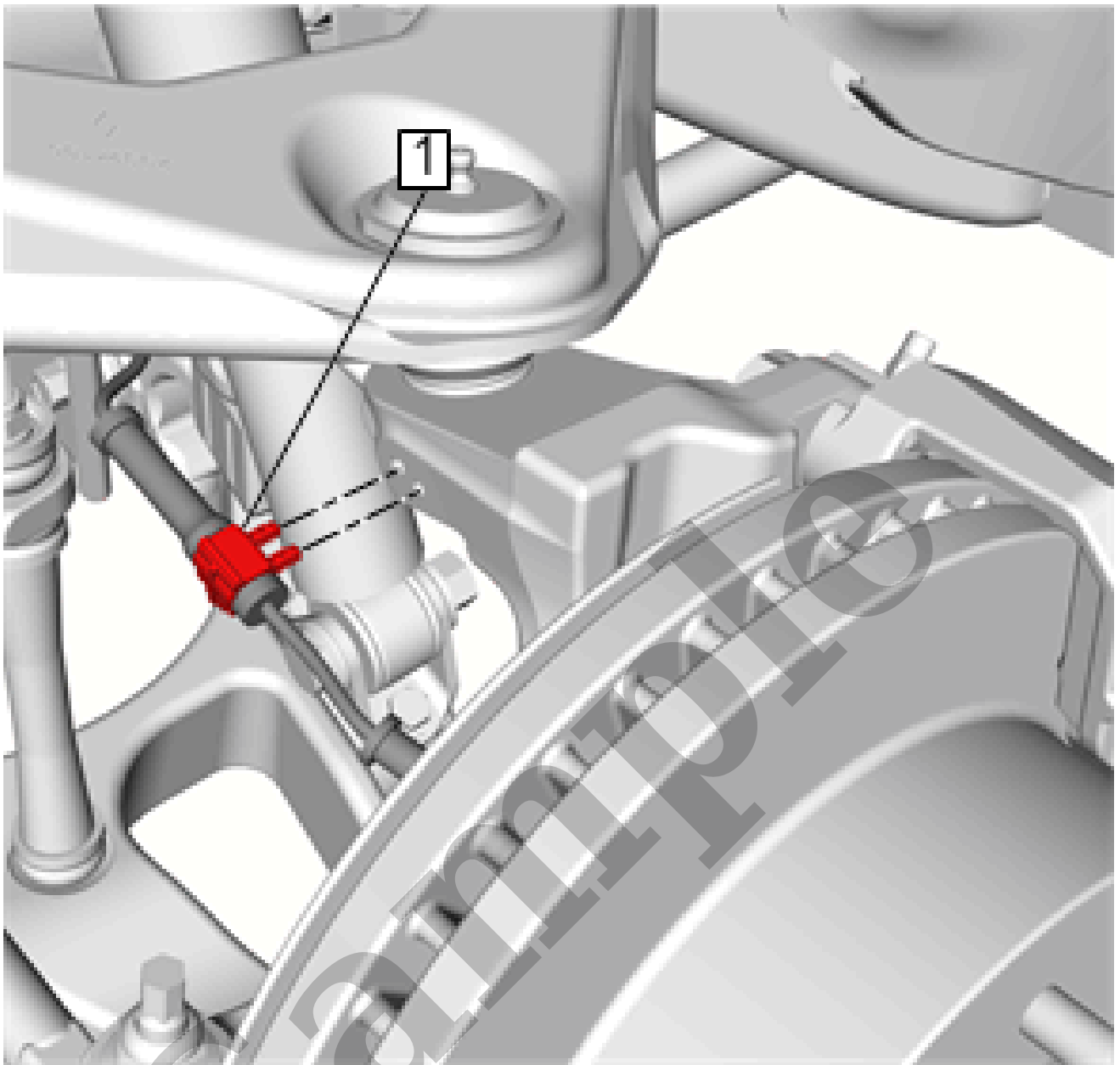
Callout	Component Name
Preliminary Procedure	
1. Remove the windshield wiper arms. Refer to Windshield Wiper Arm Replacement .	
2. Remove the air inlet grille panel extension. Refer to Air Inlet Grille Panel Extension Replacement .	
1	Air Inlet Grille Panel Push-Pin Retainer (Qty: 6)



Repair Instructions

Perform the [Diagnostic Repair Verification](#) after completing the repair.

- [Brake Pressure Modulator Valve Replacement](#)
- [Control Module References](#) for electronic brake control module replacement, programming and setup



7. Wheel Speed Sensor Wiring Harness Clip(1) »Release

Step	Action	Yes	No
	• Brake master cylinder reservoir: Clean the brake master cylinder reservoir using denatured alcohol, or equivalent, then dry the reservoir using non-lubricated, filtered air, or if necessary, replace the brake master cylinder reservoir. • Replace the brake master cylinder reservoir cap diaphragm. • Front Brake Hose Replacement • Rear Brake Hose Replacement • Front Brake Caliper Overhaul or Front Brake Caliper Replacement • Rear Brake Caliper Overhaul or Rear Brake Caliper Replacement • Brake Pressure Modulator Valve Replacement 3. If the brake fluid was NOT contaminated with an oil-based fluid, but WAS contaminated with water or dirt, rust, corrosion, and/or brake dust, replace the brake master cylinder reservoir cap diaphragm which may have allowed moisture or dirt to enter the system. 4. Refill and bleed the hydraulic brake system. Refer to Hydraulic Brake System Bleeding. Did you complete the operation and any required repairs and/or replacements?		
6	1. Inspect the following hydraulic brake system components for external fluid leaks Repair or replace any of the components found to be leaking brake fluid. Refer to the appropriate procedures: • Brake Master Cylinder Replacement Brake master cylinder reservoir cap diaphragm • Front Brake Hose Replacement • Rear Brake Hose Replacement • Brake Pipe Replacement • Front Brake Caliper Overhaul or Front Brake Caliper Replacement	Go to Step 7	Go to Step 12

YOUR CURRENT VEHICLE

DTC C028E

DTC C028E

Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.
- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) provide an overview of each diagnostic category.

DTC Descriptors

DTC C028E 05	Park Brake Solenoid Actuator Current Sensor Circuit Short to Battery or Open Circuit
DTC C028E 08	Park Brake Solenoid Actuator Current Sensor Circuit Performance – Signal Invalid

Circuit/System Description

The parking brake control module has an internal motor, apply actuator, release actuator, and temperature sensor. The parking brake control module also contains the logic for applying and releasing the parking brake when commanded by the park brake control switch. When the parking brake control module receives a signal from the switch, the internal circuit board temperature is checked to verify it is within operating range before the control module performs the requested operation.

The parking brake control module will diagnose the internal park brake motor circuit to verify it is functioning properly. The park brake motor circuit is used to command motor operation, apply and release tension on the parking brake cable, which will apply and release the parking brake. The park brake will self diagnose the internal park brake motor circuit. This circuit is used to drive the motor, which pulls on the park brake cable, ultimately applying and releasing the park brake.