

# 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.

## **1991 CHEVROLET Camaro OEM Service and Repair Workshop Manual**

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- Component terminal 30&87
- Component terminal 85&87
- **If less than infinite resistance**  
Replace the component:KR5 Rear Defogger Relay
- **If infinite resistance**

5. Connect a 3 A fused jumper wire between the test points:Component terminal 86&12 V

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

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

- **If 2  $\Omega$  or greater**  
Replace the component:KR5 Rear Defogger Relay
- **If less than 2  $\Omega$**

7. All OK.

### Repair Instructions

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

- [Rear Compartment Lift Window Replacement](#)
- [Electrical Relay Replacement](#)
- For control module replacement, programming, and setup refer to: [Control Module References](#)

Cause	Correction
Noisy Operation	Check for other components in the glass path such as wire harness, impact foam, lock rods, or cables.
	Check for proper glass alignment/attachment and door seal installation.
Windnoise	Check seals, mirror patch, and glass alignment.
False glass reversal, the glass goes down unexpectedly.	Check seals, reinitialize the glass and/or realign the glass.
	Check for debris in the glass run channel.

phone signal may cause the condition. Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to [Testing for Intermittent Conditions and Poor Connections](#).

- The problem may or may not turn ON the SERVICE VEHICLE SOON indicator or store a DTC. Do not use the symptom tables to diagnose intermittent conditions. The malfunction must be present in order to locate the problem.

Poor electrical connections or wiring cause most intermittent conditions. Perform a careful visual/physical check for the following conditions:

- Poor mating of the connector halves or a terminal not fully seated in the connector body
- An improperly formed or damaged terminal
- Reform or replace connector terminals in the problem circuit in order to ensure proper contact tension.
- Poor terminal to wire connection requires removing the terminal from the connector body in order to perform the check.

Use a scan tool in order to help detect intermittent conditions. The scan tool has several features that can be used to locate an intermittent condition. The snapshot feature can capture and store data parameters within the scan tool when the malfunction occurs. This information can then be reviewed in order to see what caused the malfunction.

### Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- [Rear Window Defogger Malfunction](#)
- [Power Windows Malfunction](#)

Circuit	Description
Control — Relay Coil	The output circuit is switched to 12 V to activate the component.
Ground — Relay Coil	Chassis Ground

Component	Description
KR5 Rear Defogger Relay	A relay is a switch that is actuated by a solenoid.
K33 HVAC Control Module	The control module controls a series of actuators to ensure optimal heating, ventilation and air conditioning of the passenger compartment. The control module does this by reading values from a variety of sensors and interprets the data and adjusts the actuators accordingly.

### Conditions for Running the DTC

Ignition » On / Vehicle » In Service Mode

### Conditions for Setting the DTC

- B0283 02Control Circuit=Short to Ground
- B0283 05Control Circuit=OpenorShort to Battery

### Actions Taken When the DTC Sets

- B0283 02E18 Rear Defogger Grid=Disabled
- B0283 05E18 Rear Defogger Grid=DisabledorAlways On

### Conditions for Clearing the DTC

- A current DTC will clear when the diagnostic runs and passes.
- A history DTC will clear after 50 consecutive malfunction-free ignition cycles.