

## Mercedes-Benz 2095450701

# Mercedes-Benz W209 CLK320 CLK500 Rear Trunk SAM Fuse Relay Box Instruction Manual

**Part Number:** 2095450701

Applicable to Mercedes-Benz W209 CLK320 and CLK500 models (2001-2009)

## 1. INTRODUCTION

This manual provides essential information regarding the Mercedes-Benz W209 Rear Trunk Signal Acquisition and Actuation Module (SAM) Fuse Relay Box, part number 2095450701. It is designed to assist owners and qualified technicians with understanding, installing, and maintaining this critical automotive component. Please read this manual thoroughly before attempting any installation or maintenance procedures.

The SAM unit is a complex electronic module responsible for controlling various electrical functions in the rear of the vehicle, including lighting, fuel pump, and other systems. Proper handling and installation are crucial for its correct operation and vehicle safety.

## 2. PRODUCT OVERVIEW

The Rear Trunk SAM Fuse Relay Box (Part No. 2095450701) integrates fuses, relays, and electronic control circuitry into a single unit. It acts as a central distribution point for power and signals to various rear-mounted electrical components.

- **Function:** Manages power distribution and signal processing for rear vehicle systems.
- **Integration:** Combines fuse protection, relay switching, and electronic control.
- **Location:** Typically located in the trunk area of compatible Mercedes-Benz W209 models.



Figure 2.1: Top view of the Mercedes-Benz W209 Rear Trunk SAM Fuse Relay Box. This image displays the overall structure of the unit, including various connector ports and the main label.



Figure 2.2: Close-up view of the product label. The label clearly shows the Mercedes-Benz branding, part number 209 545 07 01, and additional manufacturing details including "Made in Germany" and internal codes like 0000-03 175 15 0690 01 (6). The handwritten 'ADC 528' is an inventory identifier.

### 3. COMPATIBILITY

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This Rear Trunk SAM Fuse Relay Box (Part No. 2095450701) is compatible with specific Mercedes-Benz W209 CLK-Class models manufactured between 2001 and 2009. It may also be compatible with certain C-Class models (W203 type) with the same part number.

#### Confirmed Compatible Models:

- Mercedes-Benz W209 CLK320 (2001-2009)
- Mercedes-Benz W209 CLK500 (2001-2009)
- Mercedes C-CLASS 06 203 Type, Lamp; (Sdn), C230 (with ID 2095450701)
- Mercedes C-CLASS 06 203 Type, Lamp; (Sdn), C280 (with ID 2095450701)
- Mercedes C-CLASS 06 203 Type, Lamp; (Sdn), C350 (with ID 2095450701)
- Mercedes C-CLASS 06 203 Type, Lamp; (Sdn), C55 (with ID 2095450701)

Always verify the part number on your existing unit against 2095450701 or 2095450901 to ensure proper fitment. Consult a Mercedes-Benz parts catalog or a qualified technician for definitive compatibility confirmation for your specific vehicle configuration.

### 4. INSTALLATION GUIDE

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Installation of the Rear Trunk SAM Fuse Relay Box requires technical knowledge and should ideally be performed by a certified Mercedes-Benz technician or a qualified automotive electrician. Incorrect installation can lead to electrical system malfunctions or damage to vehicle components.

#### General Installation Steps (Consult Service Manual for Specifics):

1. **Safety First:** Disconnect the vehicle's battery (negative terminal first) to prevent electrical shorts and ensure safety.
2. **Locate the SAM Unit:** Access the trunk area and locate the existing SAM unit. Its exact position may vary slightly by model year.
3. **Disconnect Connectors:** Carefully unclip and disconnect all electrical connectors attached to the old SAM unit. Note their positions or take photos for reference.
4. **Remove Mounting Hardware:** Remove any screws, clips, or fasteners securing the old SAM unit in place.
5. **Remove Old Unit:** Gently remove the old SAM unit from its mounting location.
6. **Install New Unit:** Position the replacement SAM unit (Part No. 2095450701) in the correct orientation and secure it with the mounting hardware.
7. **Reconnect Connectors:** Reconnect all electrical connectors, ensuring they are fully seated and locked into place. Double-check that no connectors are left loose or incorrectly attached.
8. **Reconnect Battery:** Reconnect the vehicle's battery (positive terminal first, then negative).
9. **System Check:** Perform a diagnostic scan to clear any fault codes and verify proper operation of all affected systems (lights, fuel pump, etc.).



Figure 4.1: Angled view of the SAM unit, highlighting the various electrical connectors and their arrangement. Proper connection of these is crucial during installation.



Figure 4.2: Side view of the SAM unit, showing the profile and additional connection points or mounting tabs.

## 5. OPERATING PRINCIPLES



The SAM unit operates by receiving input signals from various sensors and switches within the vehicle. Based on these inputs and programmed logic, it then activates or deactivates specific outputs, such as relays for lights, the fuel pump, or other electrical accessories. It also monitors the electrical circuits for faults and can store diagnostic trouble codes (DTCs) if issues are detected.

- **Signal Acquisition:** Gathers data from sensors (e.g., trunk lid open/closed, brake light switch).
- **Control Logic:** Processes signals and executes commands based on the vehicle's electronic control unit (ECU) instructions.
- **Power Distribution:** Routes power through fuses and relays to activate components.
- **Diagnostic Capability:** Detects electrical faults and communicates them to the vehicle's diagnostic system.

## 6. MAINTENANCE

As a sealed electronic unit, the SAM Fuse Relay Box generally requires minimal maintenance. However, periodic inspection can help ensure its longevity and proper function.

- **Visual Inspection:** Periodically check the unit and its connectors for signs of corrosion, moisture ingress, or physical damage.
- **Fuse Checks:** If an electrical component controlled by the SAM unit malfunctions, inspect the relevant fuses within the SAM box. Replace blown fuses with new ones of the correct amperage rating.
- **Cleanliness:** Keep the area around the SAM unit clean and free from debris or liquids.

Do not attempt to open or repair the internal components of the SAM unit, as this can cause irreparable damage and void any potential warranty.

## 7. TROUBLESHOOTING

If you experience issues with electrical components controlled by the Rear Trunk SAM unit, consider the following troubleshooting steps:

- **Check Fuses:** A common cause of electrical component failure is a blown fuse. Refer to your vehicle's owner's manual for the fuse diagram and check the relevant fuses within the SAM unit.
- **Inspect Wiring:** Look for any visible damage, corrosion, or loose connections in the wiring harness leading to and from the SAM unit.
- **Diagnostic Scan:** Use an OBD-II scanner to check for diagnostic trouble codes (DTCs) related to the SAM unit or the affected electrical systems. These codes can provide valuable clues about the nature of the problem.
- **Professional Diagnosis:** If basic troubleshooting does not resolve the issue, it is recommended to seek diagnosis from a qualified Mercedes-Benz specialist. Complex electrical issues often require specialized tools and expertise.

## 8. SPECIFICATIONS

Attribute	Detail
Part Number	2095450701 (Also referred to as 2095450901 in some listings)

Attribute	Detail
Manufacturer	Mercedes-Benz (Original Equipment)
Vehicle Compatibility	Mercedes-Benz W209 CLK320, CLK500 (2001-2009), and specific W203 C-Class models
Condition	Used (as per product listing)
Inventory ID	139195 (Stock #: ADC528)

## 9. WARRANTY AND SUPPORT

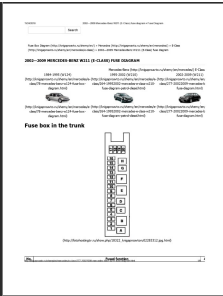
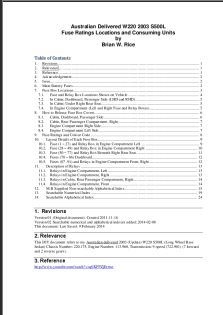
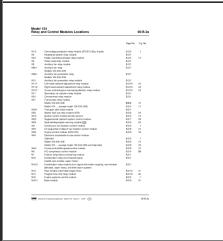
As this is a used automotive part, specific warranty terms may vary depending on the seller. Please refer to the purchase agreement or contact your vendor directly for details regarding any applicable warranty or return policy.

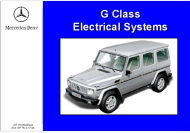

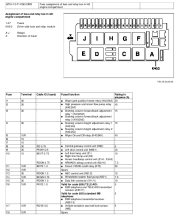
For technical support or further inquiries regarding the Mercedes-Benz W209 Rear Trunk SAM Fuse Relay Box, it is recommended to consult a certified Mercedes-Benz service center or an experienced automotive electrical specialist. You may also contact the seller, [Reused Parts LLC](#), for support related to your purchase.

For general information about Mercedes-Benz vehicles and parts, visit the official [Mercedes-Benz USA website](#).

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### Related Documents - 2095450701

	<p><a href="#">2002-2009 Mercedes-Benz W211 (E-Class) Fuse Diagram and Function List</a></p> <p>Detailed fuse diagram and function list for the 2002-2009 Mercedes-Benz W211 (E-Class) models, covering fuse boxes in the trunk, instrument panel, engine compartment, and prefuse locations. This guide helps identify the purpose of each fuse for electrical system troubleshooting.</p>
	<p><a href="#">Mercedes-Benz W220 S500L Fuse Ratings and Locations Guide</a></p> <p>A comprehensive guide for the Australian delivered 2003 Mercedes-Benz W220 S500L, detailing fuse ratings, locations, and the consuming units they protect. Includes detailed diagrams, numerical and alphabetical indexes for easy identification and troubleshooting of electrical components.</p>
	<p><a href="#">Mercedes-Benz Model 124 Relay and Control Module Locations</a></p> <p>Detailed guide to the locations and functions of relays and control modules for the Mercedes-Benz Model 124 (W124) vehicle. Includes comprehensive tables and visual location references.</p>

	<p><a href="#">Mercedes-Benz G Class Electrical Systems: A Technical Guide</a></p> <p>Comprehensive technical guide to the electrical systems of the Mercedes-Benz G Class, covering power distribution, battery, fuses, relays, SAM modules, CAN networking, lighting, security, and convenience electronics. Includes diagrams and legends.</p>
	<p><a href="#">Mercedes-Benz Sprinter Fuse Assignment Supplement</a></p> <p>Comprehensive guide detailing the fuse and relay assignments for Mercedes-Benz Sprinter vehicles, including identification of components and their functions for various fuse box locations.</p>
	<p><a href="#">Mercedes-Benz Fuse and Relay Box Assignment - Left Engine Compartment (Model 230.4)</a></p> <p>Comprehensive guide to the fuse and relay assignments for the left engine compartment (K40/2) of Mercedes-Benz Model 230.4, covering fuse functions, ratings, and associated components for engines 112, 113, and SL 55 AMG.</p>