

User Manual

Technical Description

Key W169

entral locking system

Vehicle keys

Included with your vehicle are 2 electronic main keys with integrated radio frequency and infrared remote controls plus removable mechanical key.

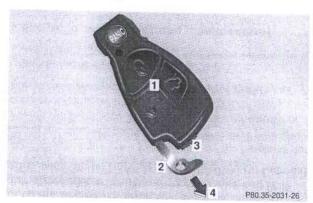
The locking tabs for the mechanical key portion of the two electronic main keys are a different color to help distinguish it.

Warning!

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When leaving the vehicle always remove the electronic key from the starter switch, and lock your vehicle. Do not leave children unattended in the vehicle, or with access to an unlocked vehicle. Unsupervised use of vehicle equipment may cause serious personal injury.

Electronic main key



The electronic main key has an integrated radio frequency and infrared remote control, plus removable mechanical key.

The remote control (1) operates all locks on the vehicle. The mechanical key (2) works only in the driver's door, trunk, and storage compartment locks.

When using the mechanical key (2) for lock operations, it can be removed by sliding it out of the remote control. To do so, move locking tab (3) to the right and slide the mechanical key (2) in direction of arrow (4).

The remote control transmitter is located in the electronic main key.

The infrared receivers are located in the front door handles.

Note:

Remove the mechanical key from the electronic main key when using valet parking service. To prevent access to trunk or storage compartments lock them separately and retain the mechanical key.

See page 42 for separate locking of trunk and page 178 for locking of glove box.

Obtaining replacement keys

Your vehicle is equipped with a theft deterrent locking system requiring a special key manufacturing process. For security reasons, replacement keys can only be obtained from your authorized Mercedes-Benz Center.

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Central locking system

Start lock-out

Important!

Removing the electronic key from the starter switch activates the start lock-out. The engine cannot be started.

Inserting the electronic key in the starter switch deactivates the start lock-out.

Note:

In case the engine cannot be started (vehicle's battery is in order), the system is not operational. Contact an authorized Mercedes-Benz Center or call 1-800-FOR-MERCedes (in the USA), or 1-800-387-0100 (in Canada).

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General notes on the central locking system

 If the electronic key is inserted in the starter switch, the vehicle cannot be locked or unlocked with the remote control.

If the vehicle cannot be locked or unlocked:

- Aim transmitter eye at a receiver of either front door handle. Check the batteries of the electronic main key, see page 339, or synchronize the electronic main key, see page 341.
- Use the mechanical key to unlock the vehicle. To start engine, insert the electronic key in the starter switch. There could be a slight delay until the electronic key can be turned in the starter switch.

Important!

When unlocking the driver's door with the mechanical key, the exterior lamps will flash and the alarm will sound.

To cancel the alarm, insert the electronic key in the starter switch or press button or on the electronic main key.

Central locking system

Radio frequency and infrared remote control

The electronic main key has an integrated radio frequency and infrared remote control.

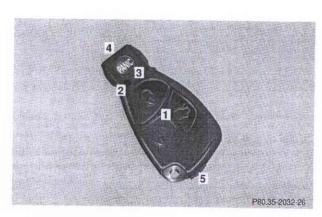
Due to the extended operational range of the remote control, it could be possible to unintentionally lock or unlock the vehicle by pressing the transmit button. If one of the transmit buttons is pressed, the battery check lamp lights up briefly – indicating that the batteries are in order. See page 339 for checking batteries.

The vehicle doors, trunk and fuel filler flap can be centrally locked and unlocked via remote control.

Opening and closing the windows and sliding/pop-up roof and switching on the driver's seat ventilation can only be done with the infrared portion of the remote control. Aim transmitter eye at a receiver (6 or 7), press and hold transmit button of or o, see page 35.

With vehicle centrally locked, the trunk can also be opened by using the remote control.

If the electronic key is inserted in starter switch, the vehicle cannot be locked or unlocked, and the trunk lid cannot be opened with the remote control.



- 1 Transmit button
 - 1 Locking
 - Unlocking
 - Opening trunk (if not separately locked)
- 2 Lamp for battery check (see page 339 for changing batteries if it does not light up briefly)
- 3 PANIC button
- 4 Transmitter eye
- 5 Locking tab for mechanical key

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Panic button



To activate press and hold button (1) for at least one second. An audible alarm and blinking exterior lamps will operate for approximately $2^{1}/_{2}$ minutes.

To deactivate press button (1) again, or insert electronic key in starter switch.

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Note:

For operation in the USA only: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any unauthorized modification to this device could void the user's authority to operate the equipment.

Mechanical keys

The mechanical keys work only in driver's door, trunk, and storage compartment locks.

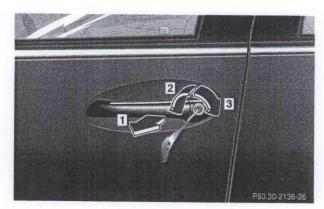
Notes:

The mechanical key does not operate the central locking system or antitheft alarm system.

The fuel filler flap cannot be locked or unlocked with the mechanical key.

If the fuel filler flap cannot be opened, see page 342.

Doors



- 1 Opening pull handle
- 2 Unlocking driver's door
- 3 Locking driver's door

Important!

The mechanical key does not operate the central locking system or antitheft alarm system.



- 4 Individual door from inside: Push lock button down to lock.
- 5 Front door from inside: Pull handle to unlock.

When you lock the driver's door with the mechanical key, the door lock button should move down.

Each individual door must be locked with the respective door lock button – the driver's door can only be locked when it is closed.

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Central locking system

If the vehicle has previously been locked from the outside, opening a door from the inside will trigger the alarm. When opening a front door while the central locking system is in the:

- selective unlocking mode, only that individual door is unlocked. The remaining doors, the trunk and fuel filler flap remain locked.
- global unlocking mode, all doors, the trunk and fuel filler flap are unlocked.

Notes:

In case of a malfunction in the central locking system the doors can be locked and unlocked individually.

To lock, push down lock buttons or turn mechanical key in driver's door lock to position 3. In addition lock the trunk.

To unlock, pull inside door handles or turn mechanical key in driver's door lock to position 2.

Rear doors can only be opened from inside by first pulling up the door lock button.

When unlocking the driver's door with the mechanical key, the exterior lamps will flash and the alarm will sound.

To cancel the alarm, insert the electronic key in the starter switch or press button σ or σ on the electronic main key.

Power closing assist for doors and trunk lid

The doors and the trunk lid close automatically if:

- · the doors are positioned against the lock,
- · the trunk lid is lowered against the lock.

It is not necessary to slam the door or trunk lid closed, a pneumatic power-assisted mechanism draw doors and trunk lid closed quietly and automatically once the lid or door has been latched. When the pneumatic power-assisted mechanism has stopped, doors and/or trunk can be reopened.

Warning!

To prevent possible personal injury, always keep hands and fingers away from the door or trunk opening when closing a door or the trunk lid. Be especially careful when small children are around.

The pneumatic power closing assist mechanism cannot be interrupted once it has been engaged.

To prevent personal injury, never actuate the closing assist mechanism by tampering with the door or trunk lid latch.

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Technical Data HF-Part Key W169

Software status: Software version: 5.1

Hardware status: HW F

with mechanical emergency key

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Initial issue: 10.10.2003 Change status:: 14.10.2003

Version: 01





Functional description:

The W211¹ key is a component of a driver authorisation system and has the following function:

Remote control for vehicle access (German abbreviation: FZB) via radio and infrared signals

A command is transmitted to the vehicle by the key via a HF transmitter after a button has been pressed on the key.

General technical data:

Temperature range:

Working temperature: $-20 \dots +65 \circ C$

Data of the HF-part

Type of data transmission: half duplex

Transmitter:

Transmitting frequency: 433.92 MHz (ECE)

315.00 MHz (USA)

Transmitting frequency tolerance: +/- 80 ppm

(production, aging, temperature)

Transmitting capacity (EIRP): typical -19 dBm @433.92 MHz

max. -22 dBm @315.00 MHz (USA) max. -41dBm@315MHz (Japan)

Modulation: Frequency shift keying (FSK2, incoherent)

Frequency shift: +/- 14 ...+/-18 kHz, nominal: +/- 16 KHz

Modulation content:
Data rate:
Coding:
Digital data
1 kBit/s
Manchester²

Data contents: Remote control (1 Kbit/s):

55 zero bits (preamble + 1 start bit + 112 bit data)

¹ Anm. d. Ü.: Muss das nicht "W169" heißen?

 $^{^{2}}$ Anm. d. Ü.: Tippfehler in der deutschen Version



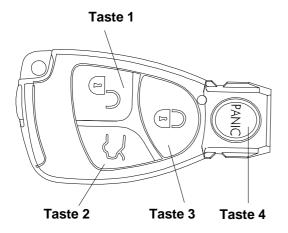
Data burst rate:

Remote control: typ.10 000/a

Annex No.5



Activating test modes on the Keyless Go key:



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Button 1: Unlock

Button 2: Tailgate/boot lid (not applicable for estate vehicles)

Button 3: Lock

Button 4: Panic (USA version)

Mechanical emergency key inside housing and latched in place

³ Anm. d. Ü.: In der Grafik: Taste = Button





Key: (set permanently to HF diagnosis, see marking)

The operating mode is switched on and off alternately by briefly pressing the respective button.

HF diagnosis:		
Button		Diagnosis operating mode
Unlocking button	(Button 1)	Transmit low transmission frequency (non-modulated)
Locking button	(Button 3)	Transmit upper transmission frequency (non-modulated)
Tailgate	(Button 2)	Transmit at 1 kHz permanent modulation



15. April 2004

Ref.: FCC ID: IYZW169

Radio equipment authorization to FCC in USA for

RF transmitter Key W169 3312

The transmitter will be supplied as an original equipment device to the car manufacturer. According to 47 CFR 15.19 (Labelling requirements) the car manufacturer will print the Following text in the appropriate User Manuel of the car:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Rietheim-Weilheim 15. April 2004

MARQUARDT GmbH