SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 118
POWER-OPERATED WINDOW, PARTITION
AND ROOF PANEL SYSTEMS

BAYERISCHE MOTOTENWERKE
2008 BMW 328i, PASSENGER CAR
NHTSA NO. C80509

GENERAL TESTING LABORATORIES, INC.
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COLONIAL BEACH, VIRGINIA 22443

AUGUST 21, 2008
FINAL REPORT
PREPARED FOR
U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE., SE
WASHINGTON, D.C. 20590
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Prepared By: [Signature]
Approved By: [Signature]
Approval Date: 8/21/08

FINAL REPORT ACCEPTANCE BY OVSC:
Accepted By: [Signature]
Acceptance Date: 8/21/08
Compliance tests were conducted on the subject 2008 BMW 328i 4-door passenger car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-118-06 for the determination of FMVSS 118 compliance.

Test failures identified were as follows:
None

Compliance Testing
Safety Engineering
FMVSS 118

Copies of this report are available from NHTSA Technical Information Services (TIS) Room W45-212 (NPO-411) 1200 New Jersey Ave., S.E. Washington, DC 20590 Telephone No. (202) 366-4947

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<td></td>
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<td></td>
</tr>
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<td></td>
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<td></td>
</tr>
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<td></td>
</tr>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
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<td></td>
</tr>
<tr>
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</table>
1.0 PURPOSE OF TEST

A model year 2008 BMW 328i Passenger Car was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 118 testing to determine if the vehicle was in compliance with the requirements of the standard. FMVSS 118 specifies requirements for power-operated window, partition, and roof panel systems to minimize the likelihood of death or injury from their accidental operation.

1.1 The test vehicle was a 2008 BMW 328i Passenger Car. The vehicle was identified as follows:

A. **Vehicle Identification Number:** WBAVC53588A246718

B. **NHTSA No.:** C80509

C. **Manufacturer:** BAYERISCHE MOTORENWERKE

D. **Manufacture Date:** 11/07

E. **Color:** Gray

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 118 testing on August 5, 2008.
SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure TP-118-06 dated 12 April 2006 and General Testing Laboratories, Inc. (GTL) Test Procedure, TP-118-03A, “Power Operated Window, Partition and Roof Panel Systems”.

FMVSS 118 Compliance Testing was performed in the following sequence:

A. Test Vehicle Identification/Documentation
B. Power Window, partition and roof panel identification/documentation
C. Interior, exterior and remote control switch identification/documentation
D. Pre-test operation of all power windows, partitions and roof panels
E. Photograph vehicle and interior, exterior and remote control devices
F. Perform Interior Locking System Off Test
G. Perform Interior Locking System with Key Removed Test
H. Perform Exterior Locking System Test
I. Perform Remote Actuation Device Test
J. Perform Occupant Compartment Actuation Device Test (Sphere Test/Pull up or Pull Out Test)
K. Perform Automatic Reversal System Test

Above tests J and K were performed for information purposes only.

2.1 SUMMARY OF RESULTS

The power window operational test resulted in no anomalies being noted. Test data indicate the FMVSS 118 requirements appear to have been satisfied. All test data resulting from the tests were recorded on test data sheets in Section 3.
SECTION 3

TEST DATA

3.0 TEST RESULTS

The following data sheets document the results of FMVSS 118 testing on the 2008 BMW 328i.
<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>PASS</th>
<th>FAIL</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4  Interior Locking system in Off Position(s)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>S4  Interior Locking System with Key Removed</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>S4  Exterior Locking System</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>S4  Remote Actuation Device</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>S6  Occupant Compartment Actuation Devices</td>
<td></td>
<td>X*</td>
<td></td>
</tr>
<tr>
<td>(Sphere Test/Pull Up or Pull Out Test)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S5  Automatic Reversal System</td>
<td></td>
<td>X*</td>
<td></td>
</tr>
</tbody>
</table>

**REMARKS:** * Compliance not required

RECORDED BY: G. Farrand  
DATE: 08/05/08

APPROVED BY: D. Messick
WPRP PRE-OPERATIONAL CHECK

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i

VEHICLE NHTSA NO: C80509

VIN: WBAVC53588A246718

VEHICLE TYPE: PASSENGER CAR

DATE OF MANUFACTURE: 11/07

LABORATORY: GENERAL TESTING LABORATORIES

TEST DATE: 08/05/08

Identify power-operated WPRP and WPRP actuation devices

<table>
<thead>
<tr>
<th></th>
<th>LEFT FRONT</th>
<th>LEFT REAR</th>
<th>RIGHT FRONT</th>
<th>RIGHT REAR</th>
<th>TAIL GATE</th>
<th>LEFT VENT</th>
<th>RIGHT VENT</th>
<th>ROOF PANEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power WPRP Installed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Individual Interior Actuation Devices</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master Control Panel Actuation Devices</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPRP Operated by Exterior Locking System</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPRP Operated by Remote Control</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
<td>X*</td>
</tr>
<tr>
<td>WPRP with Auto-Reverse Capability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPRP with Express-Up Capability</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

* Remote control opens window but does not close window

Master Control Panel Location: DRIVER’S DOOR PANEL

Exterior Locking System Location: ____________________________________________

Remote Control Type: ( ) Line of Sight ( X) Non-line of Sight

WPRP Actuation Device Design (Toggle, Rocker, Push/Pull (Lever) or describe other):

<table>
<thead>
<tr>
<th>WPRP Actuation Device Design</th>
<th>Master Control Panel</th>
<th>Individual Window</th>
<th>Roof Panel</th>
<th>Vents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Push/Pull</td>
<td>Push/Pull</td>
<td>Push/Pull</td>
<td></td>
</tr>
</tbody>
</table>

Interior Locking System Key Positions (clockwise): NONE, USES ELECTRONIC KEY

All WPRP open/close cycles are satisfactory with key in “ON” position:

(X) YES  ( ) NO

All WPRP open/close cycles are satisfactory with key in “ACCESSORY” position:

(X) YES  ( ) Not Applicable –No power to WPRP’s

REMARKS:

RECORDED BY: G. Farrand          DATE: 08/05/08

APPROVED BY: D. Messick
DATA SHEET 1
INTERIOR LOCKING SYSTEM TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i
VEHICLE NHTSA NO: C80509 VIN: WBAVC5358A246718
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 11/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 08/05/08

Key lock position at start of test execution: (X) ON ( ) ACCESSORY, Then to:
Key lock off position during test execution: ( ) LOCK (X) OFF ( ) ACCESSORY

<table>
<thead>
<tr>
<th>ACTUATION DEVICES</th>
<th>DOORS CLOSED</th>
<th>LEFT DOOR OPEN</th>
<th>RIGHT DOOR OPEN</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INOP. OPER.</td>
<td>INOP. OPER.</td>
<td>INOP. OPER.</td>
<td></td>
</tr>
</tbody>
</table>

**MASTER CONTROL PANEL ACTUATION DEVICES**

- Left Front (LF) | X | X | X | P
- Right Front (RF) | X | X | X | P
- Left Rear (LR) | X | X | X | P
- Right Rear (RR) | X | X | X | P
- Tail Gate (TG) |
- Vents |
- Roof Panel (RP) | X | X | X | P

**INDIVIDUAL ACTUATION DEVICES**

- Left Front (LF) | X | X | X | P
- Right Front (RF) | X | X | X | P
- Left Rear (LR) | X | X | X | P
- Right Rear (RR) | X | X | X | P
- Tail Gate (TG) |
- Vents |
- Roof Panel (RP) | X | X | X | P

REMARKS: Put key into receiver, started engine, then stopped engine. Remote key remained in receiver (equivalent to accessory position). Test then conducted. WPRP will not operate unless engine is started.

RECORDED BY: G. Farrand DATE: 08/05/08
APPROVED BY: D. Messick
DATA SHEET 2
INTERIOR LOCKING SYSTEM WITH KEY REMOVED TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i

VEHICLE NHTSA NO: C80509 VIN: WBAVC53588A246718

VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 11/07

LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 08/05/08

Key lock position at start of test execution: (X) ON ( ) ACCESSORY, Then to:
Key lock off position during test execution: (X) LOCK ( ) OFF ( ) ACCESSORY

<table>
<thead>
<tr>
<th>ACTUATION DEVICES</th>
<th>DOORS CLOSED</th>
<th>LEFT DOOR OPEN</th>
<th>RIGHT DOOR OPEN</th>
<th>PASS/FAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INOP.</td>
<td>OPER.</td>
<td>INOP.</td>
<td>OPER.</td>
</tr>
<tr>
<td>MASTER CONTROL PANEL ACTUATION DEVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left Front (LF)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>P</td>
</tr>
<tr>
<td>Right Front (RF)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>P</td>
</tr>
<tr>
<td>Left Rear (LR)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>P</td>
</tr>
<tr>
<td>Right Rear (RR)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>P</td>
</tr>
<tr>
<td>Tail Gate (TG)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Panel (RP)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>P</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDIVIDUAL ACTUATION DEVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Front (LF)</td>
</tr>
<tr>
<td>Right Front (RF)</td>
</tr>
<tr>
<td>Left Rear (LR)</td>
</tr>
<tr>
<td>Right Rear (RR)</td>
</tr>
<tr>
<td>Tail Gate (TG)</td>
</tr>
<tr>
<td>Vents</td>
</tr>
<tr>
<td>Roof Panel (RP)</td>
</tr>
</tbody>
</table>

REMARKS: Windows operate for approximately one minute or until a door is opened. Put key into receiver. Engine started, then stopped. Remote key removed from receiver and test was conducted.

RECORDED BY: G. Farrand DATE: 08/05/08
APPROVED BY: D. Messick
DATA SHEET 3
EXTERIOR LOCKING SYSTEM TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i
VEHICLE NHTSA NO: C80509 VIN: WBAVC53588A246718
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 11/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 08/05/08

Is vehicle equipped with an exterior locking system that can close any of the power windows, partitions or roof panels? (X) YES ( ) NO

Location of exterior locking system: Driver’s Door Key Lock

Describe how the exterior locking system is activated: By turning the driver door key to the Lock position and holding it in the lock position.

Identify the windows, partitions or roof panels that can be closed by the exterior locking system. Also, in each case, identify whether continuous activation of the locking system is required.

<table>
<thead>
<tr>
<th>WINDOW, PARTITION AND ROOF PANEL IDENTIFICATION</th>
<th>EXTERIOR LOCKING SYSTEM</th>
<th>EXTERIOR LOCKING SYSTEM (PASS/FAIL)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERABLE (YES/NO)</td>
<td>CONTINUOUS ACTIVATION REQUIRED (YES/NO)</td>
<td></td>
</tr>
<tr>
<td>LEFT FRONT (LF)</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>RIGHT FRONT (RF)</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>LEFT REAR (LR)</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>RIGHT REAR (RR)</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>VENT WINDOW(s) PARTITION (P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROOF PANEL (RP)</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>TAIL GATE (TG)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: *Continuous activation of the locking system is required for each WPRP to pass the exterior locking system safety standard requirement.

RECORDED BY: G. Farrand DATE: 08/05/08
APPROVED BY: D. Messick
DATA SHEET 4
REMOTE ACTUATION DEVICE

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i
VEHICLE NHTSA NO: C80509  VIN: WBAVC53588A246718
VEHICLE TYPE: PASSENGER CAR  DATE OF MANUFACTURE: 11/07
LABORATORY: GENERAL TESTING LABORATORIES  TEST DATE: 08/05/08

Type of remote actuation device installed on vehicle:
(X) Non Line-of-Site  ( ) Line-of-Site

Measured Range of Operation: Record the maximum operating distance of the remote actuation device in the boxes below. The range of operation shall not exceed six meters for a Non Line-of-Site Device or eleven meters for a Line-of-Site Device in any measured direction and continuous activation of the remote actuation device is required until all operable windows, partitions or roof panels are completely closed.

Pass/Fail Pass

Denote places on the vehicle where signals from the remote device are received. Add directions and distances to other places where remote device does not comply.

REMARKS: Requires continuous activation and only opens windows, will not close windows.

RECORDED BY: G. Farrand  DATE: 08/05/08
APPROVED BY: D. Messick
DATA SHEET 5
OCCUPANT COMPARTMENT ACTUATION DEVICE TEST
SPHERE TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i
VEHICLE NHTSA NO: C80509 VIN: WBAVC53588A246718
VEHICLE TYPE: PASSENGER CAR DATE OF MANUFACTURE: 11/07
LABORATORY: GENERAL TESTING LABORATORIES TEST DATE: 08/05/08

<table>
<thead>
<tr>
<th>ACTUATION DEVICES</th>
<th>APPLICABLE (YES/NO*)</th>
<th>SPHERE ACTIVATED ACTUATION DEVICE CLOSES WPRP (YES/NO)</th>
<th>TEST RESULT PASS/FAIL</th>
<th>COMPLIANCE REQUIRED (Y/N**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASTER CONTROL PANEL ACTUATION DEVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left Front (LF)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Right Front (RF)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Left Rear (LR)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Right Rear (RR)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Tail Gate (TG)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Window(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition (P)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Panel (RP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDIVIDUAL ACTUATION DEVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left Front (LF)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Right Front (RF)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Left Rear (LR)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Right Rear (RR)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
<tr>
<td>Tail Gate (TG)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Window(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition (P)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Panel (RP)</td>
<td>Yes</td>
<td>No</td>
<td>Pass</td>
<td>No</td>
</tr>
</tbody>
</table>

*This requirement does not apply to actuation devices that are mounted in a vehicle’s roof, headliner, or overhead console and that can close a window, partition, or roof panel only by continuous rather than momentary switch actuation or actuation devices that comply with the reversing requirement of FMVSS 118, S5.

** Requirement is effective 1 October 2008. Early compliance is voluntary and test results are used for information only.

RECORDED BY:  G. Farrand DATE: 08/05/08
APPROVED BY:   D. Messick
DATA SHEET 6
OCCUPANT COMPARTMENT ACTUATION DEVICE TEST
FOR POWER-OPERATED WINDOWS ONLY
PULL UP OR PULL OUT TEST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i
VEHICLE NHTSA NO:  C80509 VIN: WBAVC53588A246718
VEHICLE TYPE:   PASSENGER CAR       DATE OF MANUFACTURE:  11/07
LABORATORY:   GENERAL TESTING LABORATORIES       TEST DATE:  08/05/08

<table>
<thead>
<tr>
<th>ACTUATION DEVICES</th>
<th>SWITCH ORIENTATION</th>
<th>CLOSES POWER-OPERATED WINDOW ONLY IF: PULL UP OR PULL OUT</th>
<th>TEST RESULT</th>
<th>PASS/FAIL</th>
<th>COMPLIANCE REQUIRED (Y/N**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Control Panel Actuation Devices</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Left Front (LF)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Right Front (RF)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Left Rear (LR)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Right Rear (RR)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Vent Window(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Individual Actuation Devices</th>
<th>SWITCH ORIENTATION</th>
<th>CLOSES POWER-OPERATED WINDOW ONLY IF: PULL UP OR PULL OUT</th>
<th>TEST RESULT</th>
<th>PASS/FAIL</th>
<th>COMPLIANCE REQUIRED (Y/N**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Front (LF)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
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<tr>
<td>Right Front (RF)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
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<tr>
<td>Left Rear (LR)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
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<tr>
<td>Right Rear (RR)</td>
<td>A</td>
<td>Pull Up</td>
<td>Pass</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Vent Window(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Requirement is effective 1 October 2008. Early compliance is voluntary and test results are used for information only.

RECORDED BY: G. Farrand  DATE: 08/05/08
APPROVED BY: D. Messick
### DATA SHEET 7

**WPRP PHYSICAL CONTACT REVERSAL CAPABILITY**

**VEHICLE MAKE/MODEL/BODY STYLE:** 2008 BMW 328i

**VEHICLE NHTSA NO:** C80509  
**VIN:** WBAVC53588A246718

**VEHICLE TYPE:** PASSENGER CAR  
**DATE OF MANUFACTURE:** 11/07

**LABORATORY:** GENERAL TESTING LABORATORIES  
**TEST DATE:** 08/05/08

| Window, Partition, Roof Panel | Test Rod Placement In Window, Partition or Roof Panel | Test Rod Size (mm) | Window, Partition or Roof Panel Opening Before/After Closing (mm) | Maximum Force Measured on Test Rod (Newtons) | Window, Partition or Roof Panel Reversing Distance (mm) | Pass/Fail *
|-------------------------------|-----------------------------------------------------|--------------------|---------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------|----------------
| L.F Center Top                | 5                                                   | 230 / 285          | 91                                                            | 280                                         | **                                                     |                |
| L.R. Rear Top                 | 5                                                   | 80 / 220           | 107                                                           | 215                                         | **                                                     |                |
| R.F Center Top                | 100                                                 | 220 / 312          | 88                                                            | 212                                         | **                                                     |                |
| R.R. Front Top                | 100                                                 | 185 / 305          | 120                                                           | 205                                         | **                                                     |                |
| Roof Panel                    | 100                                                 | 260 / 355          | 105                                                           | 255                                         | **                                                     |                |

*WPRP must reverse direction before contacting or exerting a squeezing force of 100 Newtons. Upon such reversal, the WPRP must open to one of the following positions.

A. A position that is at least as open as the position at the time closing was initiated.
B. A position that is not less than 125 mm more open than the position at the time the window reversed direction, or
C. A position that permits a semi-rigid cylindrical rod that is 200 mm in diameter to be placed through the opening at the same location as the test rod.

**REMARKS:** **Not required to meet reversal requirements. This test was performed only to gather data.**

**RECORDED BY:** G. Farrand  
**DATE:** 08/05/08

**APPROVED BY:** D. Messick
SECTION 4
TEST EQUIPMENT LIST

VEHICLE MAKE/MODEL/BODY STYLE: 2008 BMW 328i
VEHICLE NHTSA NO: C80509       VIN: WBAVC53588A246718
VEHICLE TYPE: PASSENGER CAR    DATE OF MANUFACTURE: 11/07
LABORATORY: GENERAL TESTING LABORATORIES    TEST DATE: 08/05/08

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MFR</th>
<th>MODEL</th>
<th>S/N</th>
<th>CAL. PERIOD</th>
<th>DATE OF LAST CALIB.</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td>SLR DIGITAL CAMERA</td>
<td>NIKON</td>
<td>D50</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>PINCH FORCE SENSOR</td>
<td>SENSOR DEVELOPMENTS, INC.</td>
<td>10293</td>
<td>179104</td>
<td>12 MO.</td>
<td>06/08</td>
<td></td>
</tr>
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</table>

REMARKS:

RECORDED BY: G. FARRAND       DATE: 08/05/08
APPROVED BY: D. MESSICK
SECTION 5
PHOTOGRAPHS
2008 BMW 328i
NHTSA NO. C80509
FMVSS NO. 118

FIGURE 5.1
¾ FRONTAL VIEW FROM RIGHT SIDE OF VEHICLE
VEHICLE TYPE: PASSENGER CAR

MFD BY BAYERISCHE MOTORENWERKE 11/07

GVWR 4398 lbs 1995 kg
GAWR FRONT 2116 lbs 960 kg REAR 2458 lbs 1115 kg

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY, BUMPER AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

WBAVC53588A246718
### TIRE AND LOADING INFORMATION

**SEATING CAPACITY**

<table>
<thead>
<tr>
<th></th>
<th>TOTAL</th>
<th>FRONT</th>
<th>REAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

The combined weight of occupants and cargo should never exceed 480 kg or 1058 lbs.

**ORIGINAL TIRE SIZE**

<table>
<thead>
<tr>
<th>TIRE SIZE</th>
<th>COLD TIRE INFLATION PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>205/55 R 16</td>
<td>FRONT 220 kPa, 32 PSI</td>
</tr>
<tr>
<td>205/55 R 16</td>
<td>REAR 250 kPa, 36 PSI</td>
</tr>
<tr>
<td>COMPACT SPARE TIRE</td>
<td>COLD TIRE INFLATION PRESSURE</td>
</tr>
<tr>
<td>NONE</td>
<td>NONE kPa, NONE PSI</td>
</tr>
</tbody>
</table>

**Important Note:** Use inflation pressure specified above up to 100 mph only!
2008 BMW 328i
NHTSA NO. C80509
FMVSS NO. 118

FIGURE 5.5
POWER WINDOW MASTER SWITCH
2008 BMW 328i
NHTSA NO. C80509
FMVSS NO. 118

FIGURE 5.6
LEFT FRONT POWER WINDOW SWITCH
FIGURE 5.8
RIGHT FRONT POWER WINDOW SWITCH
FIGURE 5.9
RIGHT REAR POWER WINDOW SWITCH
FIGURE 5.10
ROOF PANEL POWER SWITCH
2008 BMW 328i
NHTSA NO. C80509
FMVSS NO. 118

FIGURE 5.11
REMOTE/KEY RECEIVER IN DASH
2008 BMW 328i
NHTSA NO. C80509
FMVSS NO. 118

FIGURE 5.14
REMOTE/KEY
FIGURE 5.15
TYPICAL SWITCH/SPHERE TEST SET-UP
FIGURE 5.16
TYPICAL FORCE/DEFLECTION TEST SET-UP
2008 BMW 328i
NHTSA NO. C80509
FMVSS NO. 118

FIGURE 5.17
ROOF PANEL FORCE/DEFLECTION TEST SET-UP
Opening and closing

Keys/remote controls

Each remote control contains a rechargeable battery that is automatically recharged when it is in the ignition lock while the car is being driven. Use each remote control at least twice a year for longer road trips in order to maintain the batteries’ charge status. In cars with convenient access*, the remote control contains a replaceable battery, refer to page 26.

The settings called up and implemented when the car is unlocked depend on which remote control is used to unlock the car, refer to Personal Profile, next column.

In addition, information about service requirements is stored in the remote control, refer to Service data in the remote control, page 131.

Personal Profile

New remote controls

Your BMW center can supply new remote controls with integrated keys as additional units or as replacements in the event of loss.

Personal Profile

The concept

You can set many of your BMW’s functions to suit your personal needs and preferences. Without any action on your part, Personal Profile ensures that most of these settings are stored for the remote control currently in use. When you unlock the car, the remote control used for the purpose is recognized and the settings stored for it are called up and implemented.

This means that your personal settings will be activated for you, even if in the meantime your car was used by someone else with another remote control and the corresponding settings. The individual settings are stored for up to three remote controls.

Personal Profile settings

For more information on specific settings, refer to the specified pages.

- Response of the central locking system when the car is unlocked, refer to page 19
- Automatic locking of the vehicle, refer to page 22
- Automatic call-up* of the driver’s seat position after unlocking, refer to page 38
- Triple turn signal activation, refer to page 51

Integrated key

Press button 1 to release the key.

The integrated key fits the following locks:

- Glove compartment, refer to page 92
- Driver’s door, refer to page 22
Settings for the display in the instrument cluster:
- 12h/24h format of the clock, refer to page 64
- Date format, refer to page 64
- Units of measure for fuel consumption, distance covered/remaining distances, and temperature, refer to page 64

Light settings:
- Pathway lighting, refer to page 79
- Daytime running lamps, refer to page 80

Automatic climate control*: AUTO program, cooling function and automatic recirculated-air control activated/deactivated, setting temperature, air flow rate and distribution, refer to page 86 ff

Entertainment:
- Audio volume, refer to separate Owner's Manual
- Speed-dependent volume control, refer to separate Owner's Manual

Central locking system

The concept
The central locking system is ready for operation whenever the driver's door is closed.
The system simultaneously engages and releases the locks on the following:
- Doors
- Luggage compartment lid/tailgate
- Fuel filler door

Operating from outside
- Via the remote control
- Via the door lock
- In cars with convenient access*, via the handles on the driver's and front passenger's doors

The anti-theft system is also operated at the same time. It prevents the doors from being unlocked using the lock buttons or door han-
dles. In addition, if the remote control is used, the interior lamps and the door's courtesy lamps* are also switched on or off. The alarm system* is also armed or disarmed.
For further details of the alarm system, refer to page 26.

Operating from inside
By means of the button for central locking, refer to page 22.

In the event of a sufficiently severe accident, the central locking system unlocks automatically. In addition, the hazard warning flashers and interior lamps come on.

Opening and closing:
Using the remote control

![Warning]
Persons or animals in a parked vehicle could lock the doors from the inside. You should therefore take the remote control with you when you leave the vehicle so that the latter can be opened from outside.

Unlocking
Press the button.
The interior lamps, the courtesy lamps* and the welcome lamps come on.
You can set how the vehicle is to be unlocked.
The setting is stored for the remote control currently in use.

For operating principle, refer to page 64.
1. Switch on the ignition, refer to page 46.
2. Lightly push button 1 in the turn indicator lever up or down repeatedly until the sym-
bol appears in the display accompanied by the word "SET".

3. Press button 2.

4. Lightly push button 1 in the turn indicator lever down repeatedly until the symbol appears in the display.

5. Press button 2.

6. Use button 1 to select:
   ▶️ Press the button once to unlock only the driver’s door and the fuel filler door. Press the button twice to unlock the entire vehicle.
   ▶️ 🛠️ Press the button once to unlock the entire vehicle.

7. Press button 2.
The setting is stored for the remote control currently in use.

**Convenient opening**

Hold the button down.
The windows and the glass roof* / panorama glass roof* are opened.

**Locking**

Press the LOCK button.

**Switching on interior lamps**

While the car is locked:
Press the LOCK button.
You can also use this function to locate your vehicle in parking garages etc.

**Sedan:**

**Unlocking the luggage compartment lid**

Press the button for approx. 1 second.
The luggage compartment lid opens a short distance, regardless of whether it was locked or unlocked.

The luggage compartment lid swings back and up when opened. Ensure that there is sufficient clearance. To avoid locking yourself out by accident, do not place the remote control in the cargo bay. A previously locked luggage compartment lid is locked again after closing.

Before and after each trip, check that the luggage compartment lid has not been inadvertently unlocked.

**Sports Wagon:**

**Unlocking the tailgate**

Press the button for approx. 1 second.
The tailgate opens a short distance, regardless of whether it was locked or unlocked.
The tailgate swings back and up when opened. Ensure that there is sufficient clearance. To avoid locking yourself out by accident, do not place the remote control in the cargo bay. A previously locked tailgate is locked again after closing.

Before and after each trip, check that the tailgate has not been inadvertently unlocked.

If you press the button on the remote control a second time for a longer period within three seconds, the roll-up cover is raised*. Before closing the tailgate, press the roll-up cover downward until it engages.

**Confirmation signals**

You can activate or deactivate the confirmation signals.
For operating principle, refer to page 64.

1. Switch on the ignition, refer to page 46.
2. Lightly push button 1 in the turn indicator lever up or down repeatedly until the symbol appears in the display accompanied by the word "SET".

3. Press button 2.
4. Lightly push button 1 in the turn indicator lever down repeatedly until the desired symbol appears in the display.

7. Press button 2.
The setting is stored.

Malfunctions
The remote control may malfunction due to local radio waves. If this occurs, unlock and lock the car at the door lock with the integrated key. If the car can no longer be locked with a remote control, the battery in the remote control is discharged. Use the remote control on an extended trip to recharge the battery, refer to page 18. The remote control for convenient access contains a battery that may have to be changed, refer to page 28.

For US owners only
The transmitter and receiver units comply with part 15 of the FCC/Federal Communications Commission regulations. Operation is governed by the following:

FCC ID:
LX8766S
LX8766E
LX8CAS

Compliance statement:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
▷ This device must not cause harmful interference, and
▷ This device must accept any interference received, including interference that may cause undesired operation.

Any unauthorized modifications or changes to these devices could void the user's authority to operate this equipment.
Opening and closing: Using the door lock

You can set the way in which the car is unlocked, refer to page 19.

Convenient operation
At the door lock, you can operate the windows and glass roof* / panorama glass roof*.
Hold the key in the position for unlocking or locking.

⚠️ Watch during the closing process to ensure that no one is injured. Releasing the key stops the operation.

Manual operation
In the event of an electrical malfunction, you can lock and unlock the driver's door by turning the integrated key to the corresponding limit positions in the door lock.

Opening and closing: From inside

This button serves to unlock or lock doors and the luggage compartment lid/tailgate, but does not activate the anti-theft system. The fuel filler door remains unlocked.

Automatic locking
You can also set the situations in which the car locks:
For operating principle, refer to page 64.
1. Switch on the ignition, refer to page 46.
2. Lightly push button 1 in the turn indicator lever up or down repeatedly until the symbol appears in the display accompanied by the word "SET".

3. Press button 2.
4. Lightly push button 1 in the turn indicator lever down repeatedly until the symbol appears in the display.

5. Press button 2.
6. Use button 1 to select:
   - on
     The central locking system automatically locks the vehicle after some time if no door has been opened.
   - on
     The central locking system automati-
cally locks the vehicle as soon as you drive off.

- **off**
  The central locking system remains unlocked.

7. Press button 2.
The setting is stored for the remote control currently in use.

**Unlocking and opening doors**

- Either unlock the doors together using the button for the central locking system and then pull the door handle above the armrest or
- pull on the door handle of each door twice: the first time unlocks the door, the second time opens it.

**Locking**

- Use the central locking button to lock all of the doors simultaneously, or
- press down the safety lock button of a door. To prevent you from being locked out, the open driver's door cannot be locked using the lock button.

⚠️ Persons or animals in a parked vehicle could lock the doors from the inside. You should therefore take the remote control with you when you leave the vehicle so that the latter can be opened from outside.

**Luggage compartment lid/tailgate**

- In order to avoid damage, make sure there is sufficient clearance before opening the luggage compartment lid/tailgate.

**Opening from inside**

Press the button: the luggage compartment lid/tailgate opens unless it has been locked.

**Opening from outside**

**Sedan**

Press the button, see arrow, or the button on the remote control for a longer period. The luggage compartment lid will open slightly. It can now be swung upwards.

**Sports Wagon**

Press the button, see arrow, or the button on the remote control for a longer period. The tailgate will open slightly. It can now be swung upwards.

Press the button, see arrow, or the button on the remote control a second time for a longer
period within three seconds: the roll-up cover is raised.

Opening manually

Sedan

The integrated key of the remote control, refer to page 18, fits the luggage compartment lid lock.

Turn the key all the way to the left: the luggage compartment lid opens.

If you open the luggage compartment lid using the key while the alarm system is armed, the alarm will be triggered. Switching off an alarm, refer to page 26.

Sports Wagon
In the event of an electrical malfunction:

1. From the cargo bay, swing the cover on the tailgate upward.

2. Pull the ring upward. The tailgate is unlocked.

3. Open the tailgate and close the cover again. The tailgate is locked as soon as it is pressed shut.

Locking or unlocking separately

The switch is located in the glove compartment.
1. Locking the luggage compartment lid
2. Unlocking the luggage compartment lid

Locking separately
Push the switch in the direction of arrow 1. The luggage compartment lid is locked and cannot be unlocked using the central locking system.
If you give the remote control without the integrated key to someone else while the glove compartment is locked, the luggage compartment lid cannot be opened. This is an advantage when valet parking, for example. Locking the glove compartment, refer to page 93.

Unlocking separately
Push the switch in the direction of arrow 2.

Emergency release

Pull the lever in the cargo bay. The luggage compartment lid is unlocked.

Closing
The handle recesses on the interior trim of the luggage compartment lid/tailgate make it easier to pull down.

⚠️ Make sure that the closing path of the luggage compartment lid/tailgate is clear, otherwise injuries may result.

Sports Wagon: opening and closing the rear window
Small items can be loaded and unloaded quickly when the rear window is opened separately.

⚠️ The roll-up cover is raised when the rear window is opened. Before closing the rear window, press the roll-up cover downward until it engages.

Press the button: the rear window opens slightly. It can now be swung upwards.

Press the window shut to close it.

⚠️ Make sure that the corners of any pointed or sharp-edged cargo are padded if they could bump against the rear window while the
vehicle is in motion, otherwise the heating elements of the rear window could be damaged.

### Alarm system*

#### The concept
The vehicle alarm system responds:
- When a door, the hood or the luggage compartment lid/tailgate is opened
- To movements inside the vehicle: Interior motion sensor, refer to page 26
- When the car’s inclination changes, for instance if an attempt is made to jack it up and steal the wheels or to raise it prior to towing away
- When there is an interruption in the power supply from the battery

The alarm system signals unauthorized entry attempts for a short time by means of:
- An acoustic alarm
- Switching on the hazard warning flashers
- Flashing the high beams

#### Arming and disarming
When you lock or unlock the vehicle, either with the remote control or at the door lock, the alarm system is armed or disarmed at the same time.

You can open the luggage compartment lid/tailgate even when the alarm system is armed, by pressing the button on the remote control, refer to page 20. The lid is locked and monitored again as soon as you close it.

#### Panic mode*
You can trigger the alarm system if you find yourself in a dangerous situation:
- Press the button for at least three seconds.
- To switch off the alarm: press any button.

#### Switching off an alarm
- Unlock the car with the remote control, refer to page 19.

- Insert the remote control all the way into the ignition lock.

### Indicator lamp displays

- The indicator lamp under the inside rear-view mirror flashes continuously: the system is armed.
- The indicator lamp flashes after locking: doors, hood, luggage compartment lid/tailgate or rear window are not properly closed. Even if you do not close the alerted area, the system begins to monitor the remaining areas, and the indicator lamp flashes continuously after approx. 10 seconds. The interior motion sensor and the tilt alarm sensor are not activated.
- The indicator lamp goes out after unlocking: your vehicle has not been disturbed while you were away.
- If the indicator lamp flashes after unlocking until the remote control is inserted in the ignition, but for no longer than approx. 5 minutes: your vehicle has been disturbed while you were away.

### Tilt alarm sensor
The tilt of the vehicle is monitored. The alarm system reacts, e.g. to attempts to steal a wheel or tow the vehicle.

### Interior motion sensor
In order for the interior motion sensor to function properly, the windows and glass roof must be completely closed*.
Avoiding unintentional alarms
The tilt alarm sensor and interior motion sensor may be switched off at the same time. This prevents unintentional alarms, e.g. in the following situations:

- In duplex garages
- During transport on car-carrying trains, boats/ships or on a trailer
- When animals are to remain in the vehicle

Switching off tilt alarm sensor and interior motion sensor
Press the LOCK button on the remote control again as soon as the vehicle is locked.

The indicator lamp lights up briefly and then flashes continuously. The tilt alarm sensor and the interior motion sensor are switched off until the next time the vehicle is unlocked and subsequently locked again.

Convenient access*
Convenient access enables you to enter your vehicle without needing to hold the remote control in your hand. All you need to do is wear the remote control close to your body, e.g. in your jacket pocket. The vehicle detects the corresponding remote control within the immediate vicinity or in the passenger compartment.

Convenient access supports the following functions:

- Unlocking/locking the vehicle
- Unlocking the luggage compartment lid/tailgate separately
- Engine starting
- Convenient closure

Functional requirement

- The vehicle or the luggage compartment lid/tailgate can only be locked when the vehicle detects that the remote control currently in use is outside of the vehicle.
- The vehicle cannot be locked or unlocked again until after approx. 2 seconds.

The engine can only be started when the vehicle detects that the remote control currently in use is inside the vehicle.

Comparison to the standard remote control
In general, there is no difference between using convenient access or pressing the buttons on the remote control to carry out the functions mentioned above. You should therefore first familiarize yourself with the instructions on opening and closing starting on page 18.

Special features regarding the use of convenient access are described below.

- If you notice a brief delay while opening or closing windows or the glass roof/panoroma glass roof, the system is checking whether a remote control is inside the vehicle. Please repeat the opening or closing procedure, if necessary.

Unlocking

Grasp the handle on the driver's or front passenger's door completely, arrow 1. This corresponds to pressing the button.

Locking

Touch the surface, arrow 2, with your finger for approx. 1 second. This corresponds to pressing the LOCK button.

To preserve the battery, please make sure that the ignition and all electrical consumers are switched off before locking the vehicle.
Convenient closure
For convenient closure, keep your finger on the surface, arrow 2.

Unlocking the luggage compartment lid/tailgate separately
Press the button on the outside of the luggage compartment lid/tailgate. This corresponds to pressing the button.

If the vehicle detects that a remote control has been accidentally left inside the locked vehicle’s cargo bay after the luggage compartment lid/tailgate or rear window is closed, the lid will reopen. The hazard warning flashers flash and an acoustic signal* sounds. ▲

Switching on radio readiness
Radio readiness is switched on by pressing the start/stop button, refer to page 46.

Do not depress the brake or the clutch, otherwise the engine will start. ◼

Starting the engine
You can start the engine or switch on the ignition when a remote control is inside the vehicle. It is not necessary to insert a remote control into the ignition switch, refer to page 46.

Switching off the engine in cars with automatic transmission
The engine can only be switched off when the selector lever is in position P, refer to page 47. To switch the engine off when the selector lever is in position N, the remote control must be in the ignition switch.

Before driving a vehicle with automatic transmission into a car wash
1. Insert remote control into ignition switch.
2. Depress the brake.
3. Move the selector lever to position N.
4. Switch off the engine.
The vehicle can roll.

Malfunction
Convenient access may malfunction due to local radio waves. If this happens, open or close the vehicle via the buttons on the remote control or using the integrated key. To start the engine afterward, insert the remote control into the ignition switch.

Warning lamps
The warning lamp in the instrument cluster lights up when you attempt to start the engine: the engine cannot be started. The remote control is not inside the vehicle or is malfunctioning. Take the remote control with you inside the vehicle or have it checked. If necessary, insert another remote control into the ignition switch.

The warning lamp in the instrument cluster lights up while the engine is running: the remote control is no longer inside the vehicle. After the engine is switched off, the engine can only be restarted within approx. 10 seconds.

The indicator lamp in the instrument cluster comes on: replace the battery in the remote control.

Replacing the battery
The remote control for convenient access contains a battery that will need to be replaced from time to time.
1. Take the integrated key out of the remote control, refer to page 18.

2. Remove the cover.
3. Insert the new battery with the plus side facing up.
Sedan: glass roof*, electric

To prevent injuries, watch the glass roof while closing it.

Take the remote control with you when you leave the car, otherwise children could operate the roof and possibly injure themselves.

Raising
Press the switch.

- The closed glass roof is raised and the sliding visor opens slightly.
- The open glass roof automatically travels into the raised position. The sliding visor remains completely open.

Opening, closing
- Press the switch backwards past the resistance point.
  The glass roof and the sliding visor open together as long as you hold the switch in this position.
- Press the switch backwards past the resistance point.
  The glass roof and the sliding visor open automatically. Briefly press the switch again to stop the opening movement.

You can close the glass roof in a similar manner by pressing the switch forwards. The sliding visor remains open and can be closed by hand.

For information on convenient operation via the remote control or door lock, refer to page 19 or 22.

After switching off the ignition
When the remote control is removed or the ignition is switched off, you can still operate the roof for approx. 1 minute as long as no door has been opened.

Pinch protection system
If the glass roof encounters an obstruction during closing from approximately the middle of the opening in the roof, or during closing from the raised position, the closing movement is interrupted and the glass roof is opened again slightly.

Despite the pinch protection system check and clear the roof's travel path prior to closing it, otherwise the safety system might fail to detect certain kinds of obstructions, such as very thin objects, and the roof would continue closing.

Closing without pinch protection
If there is an external danger, press the switch forward past the resistance point. The roof closes without pinch protection.

Following interruptions in electrical power supply
After a power failure, there is a possibility that the glass roof can only be raised. The system must be initialized. BMW recommends having this work done by your BMW center.

Closing manually*
In the event of an electrical malfunction, you can move the glass roof manually:

1. Unclip the front of the cover of the interior lamps using the screwdriver from the onboard tool kit, refer to page 133.
2. Insert the screwdriver into the openings on each side to press the clips.

3. Remove the control unit.

4. Unplug the motor. Considerably less effort will be required for manual operation.

5. Insert the Allen wrench* supplied with the onboard tool kit, refer to page 133, into the opening provided. Move the glass roof in the desired direction.

6. Reinstall the control unit and reattach the lamp cover.

Sports Wagon:
Panorama glass roof*

To prevent injuries, exercise care when closing the panorama glass roof and keep it in your field of vision until it is shut. Take the remote control with you when you leave the car, otherwise children could operate the roof and possibly injure themselves.

Raising
Press the switch.
The closed roof is raised and the sliding visor opens slightly.

⚠️ Do not close the sliding visor forcibly with the roof in the raised position, as this would damage the mechanism.

Opening, closing

Sliding visor
The sliding visor can be opened or closed separately when the roof is in the closed or raised position.

▷ Press the switch backwards to the resistance point.
The sliding visor opens as long as you keep the switch in this position.

▷ Tap the switch backwards past the resistance point.
The sliding visor opens automatically. Tapping the switch again stops the operation.

You can close the sliding visor in a similar manner by pressing the switch forwards.

Panorama glass roof
When the sliding visor is open, proceed as described under Sliding visor.

For information on convenient operation via the remote control or door lock, refer to page 20 or 22.
Opening and closing the roof and sliding visor at the same time

Tap the switch twice in quick succession beyond the resistance point. Tapping the switch again stops the operation.

Convenience functions

- With the roof open, press the switch twice:
  The roof is raised.
- With the roof open, tap the switch twice in the direction for opening:
  The roof is opened fully.

Comfort position

In the comfort position, the roof is not completely open, thus reducing wind noise in the passenger compartment.

Each time the panorama glass roof is opened or closed completely, it stops in the comfort position. If desired, continue the movement by pressing the switch.

After switching off the ignition

When the remote control is removed or the ignition is switched off, you can still operate the roof for approx. 1 minute as long as no door has been opened.

Pinch protection system

If the panorama glass roof or the sliding visor encounters an obstruction while closing from a position about two-thirds closed, or during closing from the raised position, the closing movement is interrupted and the panorama glass roof and the sliding visor are opened again slightly.

⚠ Despite the pinch protection system check and clear the roof’s travel path prior to closing it, otherwise the safety system might fail to detect certain kinds of obstructions, such as very thin objects, and the roof would continue closing.

Closing without pinch protection

If there is an external danger, press the switch forward past the resistance point and hold it there. The roof closes without pinch protection.

Following interruptions in electrical power supply

After a power failure, there is a possibility that the panorama glass roof can only be raised. The system must be initialized. BMW recommends having this work done by your BMW center.

Closing manually*

In the event of an electrical malfunction, you can move the panorama glass roof manually:

1. Unclip the front of the cover of the interior lamps using the screwdriver from the onboard tool kit, refer to page 133.

2. Insert the screwdriver into the openings on each side to press the clips.

3. Remove the control unit.
4. Unplug the motor. Considerably less effort will be required for manual operation.

5. Insert the Allen wrench supplied with the onboard tool kit, refer to page 133, into the opening provided. Move the panorama glass roof in the desired direction.

6. Reinstall the control unit and reattach the lamp cover.
Driving

Ignition lock
Insert the remote control into the ignition lock

> Radio readiness is switched on. Individual electrical consumers can operate.

Convenient access*.
If the car is equipped with convenient access, only insert the remote control into the ignition lock under special circumstances, refer to page 27.

Removing the remote control from the ignition lock
⚠️ Do not forcibly pull the remote control out of the ignition lock as this may cause damage.

Before removing the remote control, push it all the way in to release the locking mechanism.
> The ignition is switched off if it was on.

Automatic transmission
You cannot take out the remote control unless the selector lever is in the P position: interlock.

Start/stop button
Pressing the start/stop button switches radio readiness or the ignition on or off.

⚠️ The engine is started when you press the start/stop button and depress the clutch if the car has manual transmission, or the brake if the car has automatic transmission.

Radio readiness
Individual electrical consumers can operate. The time and the outside temperature are displayed in the instrument cluster.

Radio readiness is switched off automatically:
> When the remote control is removed from the ignition lock
> In cars with convenient access*, by touching the surface above the door lock, refer to Locking on page 27.

Ignition on
All electrical consumers can operate. The odometer and trip odometer are displayed in the instrument cluster.

⚠️ When the engine is off, please switch off the ignition and any unnecessary electrical consumers in order to preserve the battery.

Radio readiness and ignition off
All indicator and warning lamps as well as displays in the instrument cluster go out.
Starting the engine

⚠️ Do not run the engine in closed rooms, otherwise the inhalation of toxic exhaust gases can cause unconsciousness and death. The exhaust gases contain carbon monoxide, an odorless and colorless, but highly toxic gas. Never leave an unattended vehicle with the engine running, otherwise such a vehicle represents a potential safety hazard.

Before leaving the car with the engine running, place the transmission in idle or move the selector lever to position P and forcefully apply the parking brake to prevent the car from moving.⚠️

⚠️ Avoid frequent starting in quick succession as well as repeated start attempts in which the engine does not start. Otherwise, the fuel is not burned or incompletely burned and there is a danger of overheating and damaging the catalytic converter.⚠️

Do not wait for the engine to warm up while the vehicle remains stationary. Start driving right away, but at moderate engine speeds.

Manual transmission

Remote control in the ignition lock or, with convenient access, inside the vehicle, refer to page 27.

1. Depress the brake.
2. Depress the clutch and shift to idle position.
3. Press the start/stop button.

The starter operates automatically for a certain time, and stops automatically as soon as the engine has started.

Automatic transmission

Remote control in the ignition lock or, with convenient access, inside the vehicle, refer to page 27.

1. Depress the brake.
2. Move the selector lever to position P.
3. Press the start/stop button.

The starter operates automatically for a certain time, and stops automatically as soon as the engine has started.

Switching off the engine

⚠️ Always take the remote control with you when you leave the vehicle.

When parking, apply the parking brake forcefully, otherwise the vehicle could begin to roll.⚠️

Manual transmission

1. With the car at a standstill, press the start/stop button.
2. Shift into first gear or reverse.
3. Forcefully apply the parking brake.
4. Removing the remote control from the ignition lock, refer to page 46.

Automatic transmission

1. With the car at a standstill, move the selector lever to position P.
2. Press the start/stop button.
3. Forcefully apply the parking brake.
4. Removing the remote control from the ignition lock, refer to page 46.

Parking brake

The parking brake is primarily intended to prevent the vehicle from rolling while parked; it brakes the rear wheels.