



**BMW
MOTORRAD**

RIDER'S MANUAL (US MODEL)

R 1250 RS



MAKE LIFE A RIDE

Vehicle data

Model

Vehicle identification number

Color number

First registration

License plate

Retailer data

Contact in Service

Ms./Mr.

Phone number

Retailer's address/Phone (company stamp)

YOUR BMW.

We are pleased that you have chosen a BMW Motorrad vehicle and welcome you to the family of BMW riders. Familiarize yourself with your new vehicle so that you can ride safely and confidently in all traffic situations.

About these operating instructions

Read these operating instructions before starting your new BMW. It contains important notes about operating the vehicle that will enable you to make full use of the technical assets of your BMW.

You will also obtain preventive maintenance and care instructions, which are beneficial to operating and road safety and help retain the value of your vehicle as much as possible.

If you should decide to sell your BMW one day, please remember to hand over these operating instructions as well. They are an important part of your vehicle.

We wish you many miles of safe and enjoyable riding with your BMW

BMW Motorrad.

01 GENERAL INSTRUCTIONS	2	04 OPERATION	52
Overview	4	Ignition switch/steering lock	54
Abbreviations and symbols	4	Ignition with Keyless Ride	56
Equipment	5	Emergency on/off switch (kill switch)	60
Technical data	5	Lights	60
Timeliness of the status of this manual	6	Hazard warning lights	62
Additional sources of information	6	Turn indicators	62
Certificates and operating permits	6	Traction control (ASC/DTC)	63
Data memory	6	Electronic chassis and suspension adjustment (D-ESA)	64
02 OVERVIEWS	12	Riding mode	67
General view, left side	14	PRO riding mode	69
General view, right side	15	Adaptive cruise control	70
Underneath the seat	16	Hill Start Control	73
Multifunction switch, left	17	Shiftpoint light	76
Multifunction switch, right	18	Anti-theft alarm system (DWA)	76
Instrument cluster	19	Tire pressure control (RDC)	79
03 DISPLAYS	20	Heated grips	79
Indicator and warning lights	22	Rider seat and passenger seat	80
TFT display in Pure Ride view	23	05 TFT DISPLAY	82
TFT display in the View menu	24	General notes	84
Indicator lights	25	Principle	85
		Pure Ride view	91
		General settings	92
		Bluetooth	94
		My Vehicle	97
		Sport	100

Navigation	102
Media	104
Phone	104
Displaying software version	105
Displaying license information	105

06 SETTING 106

Mirrors	108
Windshield	108
Headlights	109
Clutch	109
Gearshift lever	110
Brake	111
Footrests	113
Spring preload	114
Damping	115

07 RIDING 116

Safety instructions	118
Observe checklist	121
Before every journey	121
At every third refueling stop	121
Starting	121
Breaking in	124
Shifting gears	125
Brakes	127
Parking your motorcycle	129
Refueling	130
Securing motorcycle for transportation	135

08 TECHNOLOGY IN DETAIL 138

General notes	140
Anti-lock braking system (ABS)	140
Traction control (ASC/DTC)	143
Dynamic engine brake control (MSR)	145
Dynamic ESA	146
Riding mode	147
Dynamic Brake Control	149
Tire pressure control (RDC)	150
Gear Shift Assistant	151
Hill Start Control	153
ShiftCam	154

09 MAINTENANCE 156

General notes	158
Onboard tool set	159
Service tool set	159
Front-wheel stand	159
Rear-wheel stand	161
Engine oil	162
Brake system	164
Clutch	168
Coolant	168
Tires	169
Wheel rims and tires	170
Wheels	171
Silencer	177
Light sources	180
Jump-starting	182
Battery	183

Fuses	187	Brakes	221
Diagnostic socket	189	Wheels and tires	222
		Electrical system	223
<hr/>		Anti-theft alarm system	224
10 ACCESSORIES	192	Dimensions	224
General notes	194	Weights	225
Onboard power sockets	194	Performance data	225
Case	195		
Topcase	198	<hr/>	
Navigation system	200	13 SERVICE	226
<hr/>		Reporting safety defects	228
11 CARE	206	BMW Motorrad Service	229
Care products	208	BMW Motorrad Electronic service history (eSH)	229
Washing your motorcycle	208	BMW Motorrad Mobility Services	230
Cleaning sensitive motorcycle parts	209	Maintenance procedures	230
Care of paintwork	210	BMW Service	230
Paint preservation	211	Maintenance schedule	232
Store motorcycle	211	Maintenance confirmations	233
Putting the motorcycle into operation	211	Service confirmations	247
<hr/>			
12 TECHNICAL DATA	212	APPENDIX	250
Troubleshooting chart	214	Certificate for electronic immobilizer	251
Threaded fasteners	216	Certificate for Keyless Ride	253
Fuel	218	Certificate for tire pressure control	257
Engine oil	219		
Engine	219		
Clutch	220		
Transmission	220		
Rear-wheel drive	220		
Frame	221		
Suspension	221		

**Certificate for TFT
instrument cluster** **258**

INDEX **262**

GENERAL IN- STRUCTIONS

01

OVERVIEW	4
ABBREVIATIONS AND SYMBOLS	4
EQUIPMENT	5
TECHNICAL DATA	5
TIMELINESS OF THE STATUS OF THIS MANUAL	6
ADDITIONAL SOURCES OF INFORMATION	6
CERTIFICATES AND OPERATING PERMITS	6
DATA MEMORY	6

4 GENERAL INSTRUCTIONS

OVERVIEW

This Rider's Manual has been designed to provide quick and efficient orientation. The quickest way for you to find information on specific topics is to consult the comprehensive index at the back of the manual. If you would like to start with a quick overview of your motorcycle, this information has been provided in the Overview chapter. All maintenance and repair work carried out on your motorcycle will be documented in the Service chapter. Documentation confirming performance of scheduled maintenance is a precondition for generous handling of out-of-warranty claims and goodwill warranty treatment.

When the time comes to sell your BMW, remember to hand over this Rider's Manual; it is an important part of the motorcycle.

ABBREVIATIONS AND SYMBOLS

 **CAUTION** Hazard with low risk. Failure to avoid this hazard can result in minor or moderate injury.

 **WARNING** Hazard with moderate risk. Failure to avoid this hazard can result in death or serious injury.

 **DANGER** Hazard with high risk. Failure to avoid this hazard results in death or serious injury.

 **ATTENTION** Special instructions and precautionary measures. Non-compliance can cause damage to the vehicle or accessories and warranty claims may be denied as a result.

 **NOTICE** Special information on operating and inspecting your motorcycle as well as maintenance and adjustment procedures.

- Instruction.
- » Result of an activity.
-  Reference to a page with more detailed information.
- ◁ Indicates the end of accessory or equipment-dependent information.
-  Tightening torque.

	Technical data.
NV	National-market version.
OE	Optional equipment. BMW Motorrad optional equipment is already completely installed during motorcycle production.
OA	Optional accessories. BMW Motorrad optional accessories can be purchased and retrofitted at your authorized BMW Motorrad retailer.
ABS	Anti-Lock Brake System.
ASC	Automatic Stability Control.
D-ESA	Electronic chassis and suspension adjustment.
DTC	Dynamic Traction Control
DWA	Anti-theft alarm.
EWS	Electronic immobilizer.
TPC	Tire Pressure Control (TPC).

EQUIPMENT

When you ordered your BMW Motorrad motorcycle, you chose various items of custom equipment. These operating instructions describe optional equipment (OE) offered by BMW and selected optional accessories (OA). This explains why the manual may also contain descriptions of equipment which you have not ordered. Please note, too, that your motorcycle might not be exactly as illustrated in this manual on account of country-specific differences. If your motorcycle features equipment that is not described here, you can find these features described in a separate manual.

TECHNICAL DATA

All dimensions, weights and performance data contained in these operating instructions refer to the German Institute for Standardization i.e. DIN (Deutsches Institut für Normung e. V.) and comply with their tolerance specifications. The technical data and specifications in these operating instructions serve as points of reference. The vehicle-specific

6 GENERAL INSTRUCTIONS

data may vary, for instance due to the selected optional equipment, national-market version or country-specific measuring procedures. Detailed values can be obtained from the registration documents or requested from your BMW Motorrad retailer or other qualified service partner or specialist workshop. The information on the vehicle documents always takes precedence over the information in these operating instructions.

TIMELINESS OF THE STATUS OF THIS MANUAL

The high safety and quality level of BMW motorcycles are ensured by consistent, ongoing development efforts embracing their design, equipment and accessories. For this reason, some aspects of your motorcycle may vary from the descriptions in these operating instructions. In addition, BMW Motorrad cannot guarantee the total absence of errors. We hope you will appreciate that no claims can be recognized that are based on the data, illustrations or descriptions in this manual.

ADDITIONAL SOURCES OF INFORMATION

BMW Motorrad retailer

Your BMW Motorrad retailer is always happy to answer any of your questions.

Internet

The Operating Instructions for your motorcycle, the operating and installation instructions for optional accessories and general BMW Motorrad information related to the technology or other features are available at bmw-motorrad.com/manuals.

CERTIFICATES AND OPERATING PERMITS

The certificates for the vehicle and the official operating permits for possible accessories are available at bmw-motorrad.com/certification.

DATA MEMORY

General information

Control units are installed in the vehicle. Control units process data received from vehicle sensors, self-generated data or data exchanged between control units, for example. Some control units are required for safe vehicle operation or pro-

vide riding assistance, such as driver assistance systems. Control units also make comfort and infotainment functions possible.

Information about the stored or exchanged data can be obtained from the vehicle manufacturer, such as in the form of a separate booklet.

Personal references

Every vehicle is marked with a unique vehicle identification number. Depending on the country, the vehicle owner can be identified using the vehicle identification number and license plate and with the help of the relevant authorities. There are also other ways to trace data obtained from the vehicle back to the driver or vehicle owner, such as via the ConnectedDrive Account that was used.

Data privacy laws

In accordance with applicable data privacy laws, vehicle users have certain rights over the vehicle manufacturer or company that collects or processes personal data.

Vehicle users have the right to obtain comprehensive information without charge from the

locations that store the vehicle user's personal data.

These locations may be:

- The vehicle manufacturer
- Qualified service partners
- Specialist workshops
- Service providers

Vehicle users may request information about the type of personal data that is stored, the purpose for which the data will be used and the source of the data. This information can only be obtained by a registered owner or a person with written proof authorizing use of the vehicle.

The right to information also includes information related to data transmitted to other companies or locations.

The vehicle manufacturer's website contains the appropriate privacy policy notices. The privacy policy notices contain information on the right to delete or correct data. The vehicle manufacturer also provides the manufacturer contact information and the contact information of the data security officer.

The vehicle owner can have a BMW Motorrad retailer or other qualified service partner or specialist workshop read out

8 GENERAL INSTRUCTIONS

the data stored in the vehicle for a fee if required.

The vehicle data is read out via the vehicle's legally mandated socket for onboard diagnosis (OBD).

Legal requirements for the disclosure of data

The vehicle manufacture is required by the law applicable in this context to provide authorities with the data stored by the manufacturer. Providing this data within the scope required is on a case-by-case basis, for instance to clarify a criminal offense.

Government agencies are authorized by the law applicable in this context to read out the data from the vehicle themselves in individual cases.

Operating data in the vehicle

Control units process data so that the vehicle can run.

Examples of this include:

- Status messages from the vehicle and its individual components, such as wheel RPM, wheel speed and deceleration
- Environmental conditions, such as temperature

The data is processed only in the vehicle itself and is usually temporary. The data is not

stored beyond the period in which the vehicle is operating.

Electronic components such as control units contain components for storing technical information. This may be information about the vehicle's condition, component load, events or faults stored temporarily or permanently.

This information generally documents the condition of a component, module, system or the surrounding area; for example:

- Operating conditions of system components, such as fill levels and tire pressure
- Malfunctions and faults in key system components, such as lights and brakes
- Vehicle responses in specific riding situations, such as the activation of driving stability control systems
- Information about events causing damage to the vehicle

The data is necessary for providing control unit functions. In addition, it is used by the vehicle manufacturer to detect and eliminate malfunctions as well as to optimize vehicle functions.

The majority of this data is temporary and is processed only within the vehicle itself.

Only a small amount of event-driven data is stored in the event data recorder and fault memory.

When a vehicle is serviced, such as for repairs, servicing processes, warranty cases and quality assurance measures, this technical information can be read out from the vehicle together with the vehicle identification number.

The information can be read out by a BMW Motorrad retailer or other qualified service partner or specialist workshop. The vehicle's legally mandated socket for onboard diagnosis (OBD) is used to read out the data.

The data is collected, processed and used by the respective retailer network locations. The data documents the vehicle's technical states and helps with fault finding, compliance with warranty obligations and quality improvements.

The manufacturer also has product monitoring obligations arising from product liability law. The vehicle manufacturer requires technical data from the vehicle in order to fulfill these obligations. The data

from the vehicle can also be used to verify customer warranty and guarantee claims. The fault memory and event data recorder in the vehicle can be reset by a BMW Motorrad retailer or other qualified service partner or specialist workshop as part of a repair or servicing.

Data input and data transfer in the vehicle

General information

Depending on the equipment, comfort settings and individualized settings in the vehicle can be saved and changed or reset at any time.

Examples of this include:

- Windshield position settings
- Chassis and suspension adjustment settings

It is possible to introduce data into the vehicle entertainment and communication system via a smartphone, for instance.

Depending on the individual equipment, this includes:

- Multimedia data, such as music for playback
- Address book data for use in conjunction with a communication system or integrated navigation system
- Entered navigation destinations

10 GENERAL INSTRUCTIONS

–Data about the use of Internet services. This data can be stored locally in the vehicle or is on a device connected to the vehicle, such as a smartphone, USB stick or MP3 player. If this data is saved in the vehicle, it can be deleted at any time.

This data is transmitted to third parties only upon personal request as part of the use of online services. The data transmitted depends on the selected settings when using the services.

Integrating mobile end devices

Depending on the equipment, mobile end devices connected to the vehicle, such as smartphones, are controlled using the vehicle's operating elements.

This enables audio and visual output from mobile end devices through the multimedia system. At the same time, certain information is transmitted to the mobile end device. This includes for instance position data and other general vehicle data, depending on the type of integration, and makes it possible to optimize the use of se-

lected apps, such as those for navigation or audio playback. The way the data is processed further is determined by the provider of the particular app used. The range of possible settings depends on the particular app and the operating system of the mobile end device.

Services

General information

If the vehicle has a mobile phone connection, this connection makes it possible to exchange data between the vehicle and other systems. The mobile phone connection is made possible through the vehicle's transmitter and receiver or via personally integrated mobile end devices such as smartphones. Online functions, as they are called, are used over this mobile phone connection. These include online services and apps provided by the vehicle manufacturer or other providers.

Vehicle manufacturer services

In the case of the vehicle manufacturer's online services, the particular functions are described at the appropriate location, such as in the operating instructions or on manufactur-

er's website. The relevant legal information on data privacy is also provided there. Personal data may be used in order to provide online services. The data is exchanged over a secure connection, i.e. with the vehicle manufacturer's IT systems which are intended for this purpose.

Any collection, processing and use of personal data that goes beyond the provision of services take place only as permitted by law, on the basis of a contractual agreement or as a result of consent. It is also possible to have the entire data connection activated or deactivated. This is not the case for legally prescribed functions.

Services of other providers

When using the online services of other providers, these services are subject to the responsibility and the data protection and usage conditions of the respective provider. The vehicle manufacturer has no control over the content exchanged via these services. Information about the type, scope and purpose of collecting and using personal data as part of third-party services can be

obtained from the particular service provider.

OVERVIEWS

02

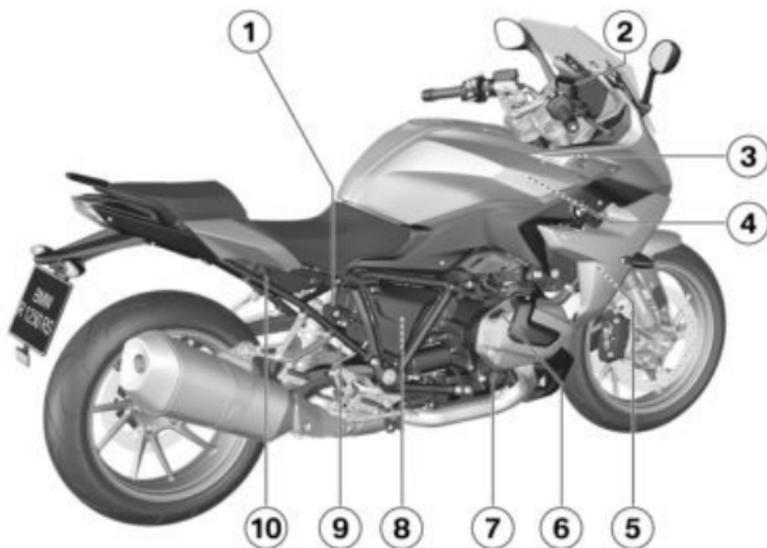
GENERAL VIEW, LEFT SIDE	14
GENERAL VIEW, RIGHT SIDE	15
UNDERNEATH THE SEAT	16
MULTIFUNCTION SWITCH, LEFT	17
MULTIFUNCTION SWITCH, RIGHT	18
INSTRUMENT CLUSTER	19

14 OVERVIEWS

GENERAL VIEW, LEFT SIDE



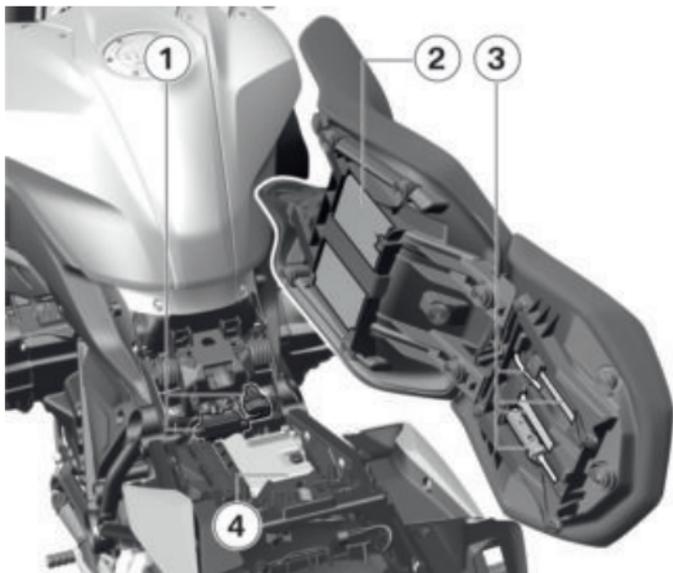
- 1** Clutch fluid reservoir
(168)
- 2** Fuel filler opening
(131)
- 3** Seat lock (80)
- 4** Adjuster for rear damping (at the bottom on the spring strut) (115)

GENERAL VIEW, RIGHT SIDE


- | | |
|--|---|
| <p>1 Adjuster for spring preload, rear (☞ 114)</p> <p>2 Brake-fluid reservoir, front (☞ 166)</p> <p>3 Vehicle identification number (on steering head at right)
Type plate (on steering head at left)</p> <p>4 Coolant level indicator (☞ 168)
Coolant expansion tank (☞ 169)</p> <p>5 Tire inflation pressure table</p> <p>6 Oil filler opening (☞ 163)</p> | <p>7 Engine oil indicator (☞ 162)</p> <p>8 Behind the side trim panel: Battery (☞ 183)
Remote positive terminal (☞ 182)
Data link connector (☞ 189)</p> <p>9 Brake-fluid reservoir, rear (☞ 167)</p> <p>10 Onboard power socket (☞ 194)</p> |
|--|---|

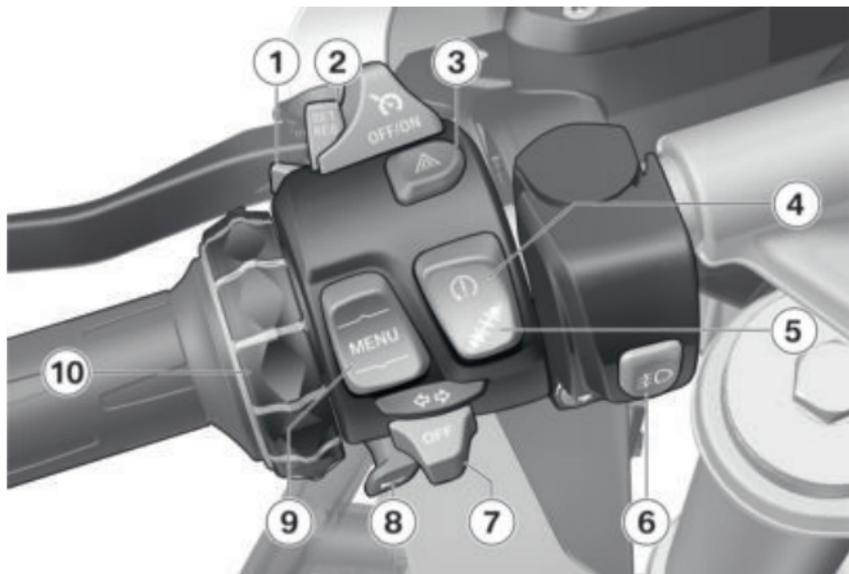
16 OVERVIEWS

UNDERNEATH THE SEAT



- 1 Fuses (→ 187)
- 2 Rider's manual
- 3 Standard tool kit (→ 159)
- 4 Payload table

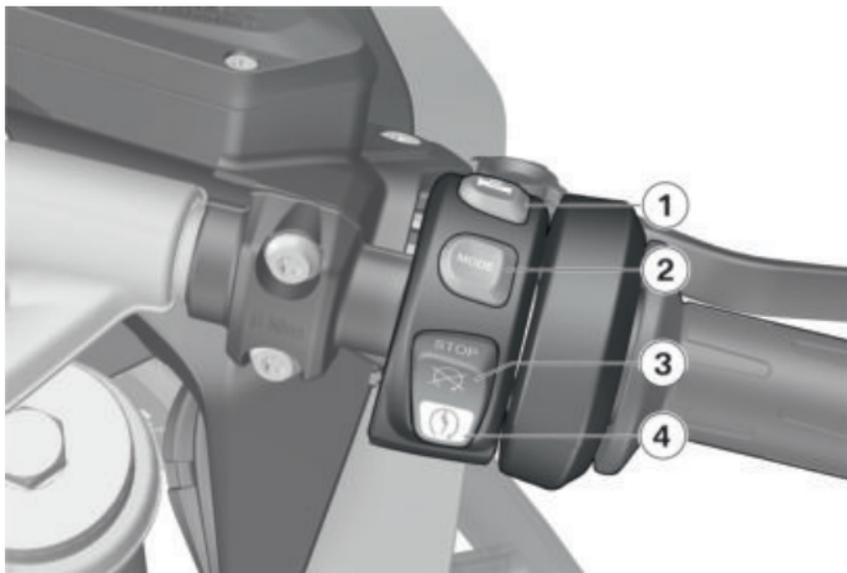
MULTIFUNCTION SWITCH, LEFT



- | | |
|--|---|
| <p>1 High beams and headlight flasher (▮▮▮ 60)</p> <p>2 –with speed control^{OE} Adaptive cruise control (▮▮▮ 71).</p> <p>3 Hazard warning lights (▮▮▮ 62)</p> <p>4 ASC/DTC (▮▮▮ 63)</p> <p>5 –with Dynamic ESA^{OE} Dynamic ESA adjustment options (▮▮▮ 64)</p> <p>6 –with LED additional headlight^{OA} Additional headlight (▮▮▮ 61).</p> <p>7 Turn indicators (▮▮▮ 62)</p> <p>8 Horn</p> | <p>9 Rocker button MENU (▮▮▮ 85)</p> <p>10 Multi-Controller Operating elements (▮▮▮ 85)</p> |
|--|---|

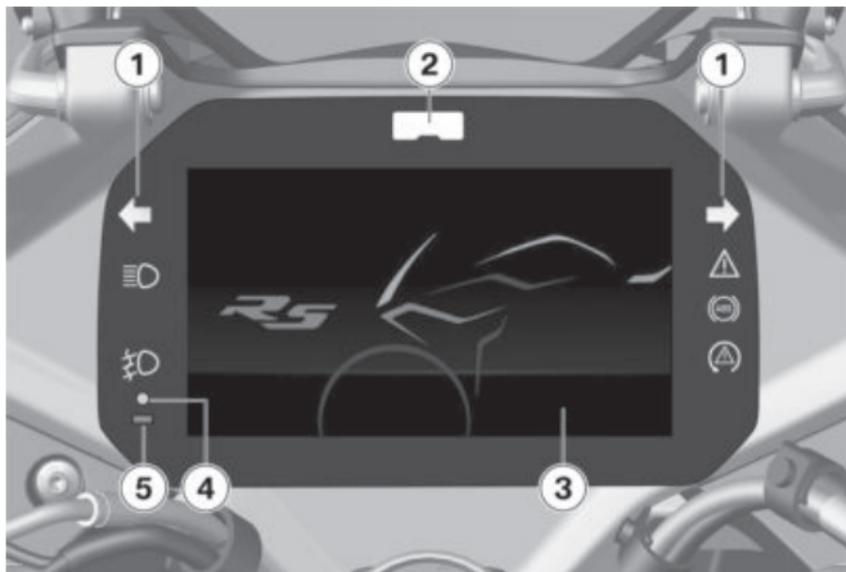
18 OVERVIEWS

MULTIFUNCTION SWITCH, RIGHT



- 1 Heating (➡ 79)
- 2 Riding mode (➡ 67)
- 3 Emergency-off switch
(➡ 60)
- 4 Starter button
Start the engine (➡ 121).

INSTRUMENT CLUSTER



- 1 Indicator and warning lights (➡ 22)
- 2 –with riding modes Pro^{OE}
Shiftpoint light (➡ 126)
- 3 TFT display (➡ 23)
(➡ 24)
- 4 Anti-theft alarm system
LED
–with anti-theft alarm system (DWA)^{OE}
Alarm signal (➡ 77)
–with Keyless Ride^{OE}
Indicator light for radio-operated key
Switching on ignition
(➡ 57).
- 5 Photosensor (for adjusting brightness of instrument lighting)

DISPLAYS

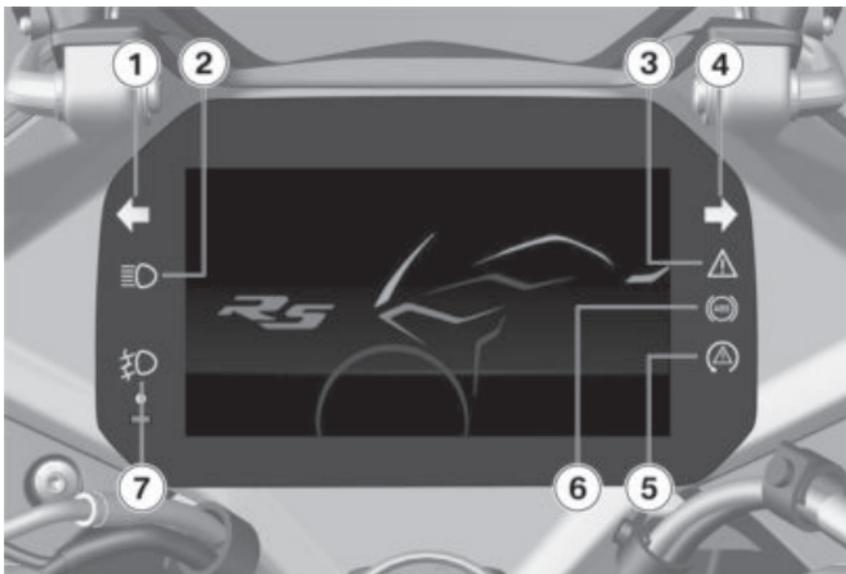
03

INDICATOR AND WARNING LIGHTS	22
TFT DISPLAY IN PURE RIDE VIEW	23
TFT DISPLAY IN THE VIEW MENU	24
INDICATOR LIGHTS	25



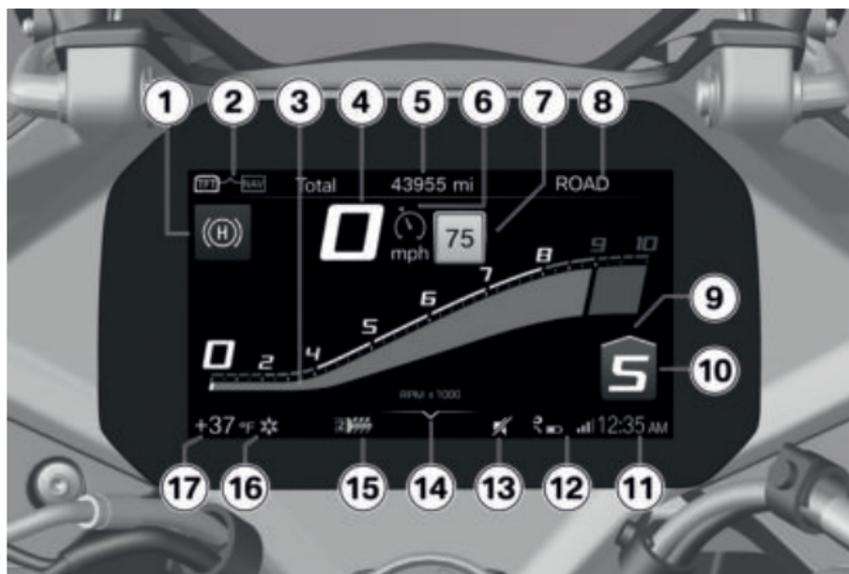
22 DISPLAYS

INDICATOR AND WARNING LIGHTS



- 1 Turn indicator, left (➡ 62)
- 2 High beams (➡ 60)
- 3 General warning light (➡ 25)
- 4 Turn indicator, right (➡ 62)
- 5 ASC (➡ 45)
–with riding modes Pro^{OE}
DTC (➡ 45)
- 6 ABS (➡ 45)
- 7 –with LED additional headlight^{OA}
Additional headlight (➡ 61).

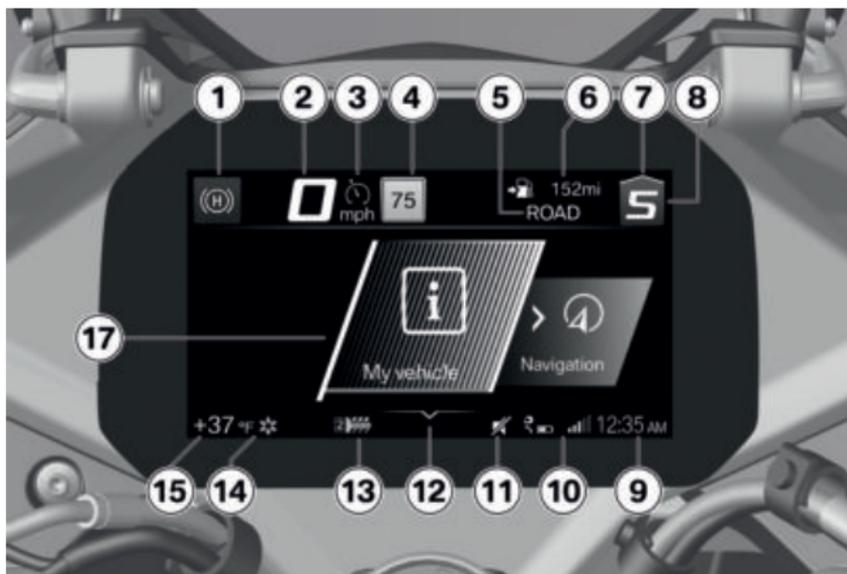
TFT DISPLAY IN PURE RIDE VIEW



- | | |
|--|--|
| 1 Hill Start Control (▮▮▮ 48) | 11 Clock (▮▮▮ 93) |
| 2 Changing operating focus (▮▮▮ 89) | 12 Connection status (▮▮▮ 95) |
| 3 Tachometer (▮▮▮ 91) | 13 Muting (▮▮▮ 92) |
| 4 Speedometer | 14 Operating assistance |
| 5 Rider info. status line (▮▮▮ 89) | 15 Heated grip settings (▮▮▮ 79) |
| 6 –with speed control ^{OE} Adaptive cruise control (▮▮▮ 71). | 16 Outside temperature warning (▮▮▮ 32) |
| 7 Speed Limit Info (▮▮▮ 91) | 17 Outside temperature |
| 8 Riding mode (▮▮▮ 67) | |
| 9 Upshift recommendation (▮▮▮ 92) | |
| 10 Gear indicator, "N" is displayed while in neutral position. | |

24 DISPLAYS

TFT DISPLAY IN THE VIEW MENU



- | | |
|---|--|
| 1 Hill Start Control (►►► 48) | 12 Operating assistance |
| 2 Speedometer | 13 Heated grip settings (►►► 79) |
| 3 –with speed control ^{OE}
Adaptive cruise control (►►► 71). | 14 Outside temperature warning (►►► 32) |
| 4 Speed Limit Info (►►► 91) | 15 Outside temperature |
| 5 Riding mode (►►► 67) | 16 Menu area |
| 6 Rider info. status line (►►► 89) | |
| 7 Upshift recommendation (►►► 92) | |
| 8 Gear indicator, "N" is displayed while in neutral position. | |
| 9 Clock | |
| 10 Connection status | |
| 11 Muting (►►► 92) | |

INDICATOR LIGHTS

Display

Warnings are displayed with appropriate warning lights. Warnings are indicated by the general warning light in conjunction with a dialog in the TFT display. The general warning light lights up in either yellow or red depending on the urgency of the warning.

 The general warning light lights up for the most urgent warning. You will find an overview of the potential warnings on the following pages.



Check Control display

The messages in the display are shown differently in the display. Different colors and characters are used depending on the priority:

- Green CHECK OK **1**: no message, values optimal.
- White circle with small "i" **2**: information.
- Yellow warning triangle **3**: warning message, value not optimal.
- Red warning triangle **3**: warning message, value critical



Value display

The symbols **4** differ in their display. Different colors are used depending on the assessment of value. Instead of numerical values **8** with units **7**, texts **6** are also displayed:

Color of the symbol

- Green: (OK) current value is optimal.
- Blue: (Cold!) current temperature is too low.
- Yellow: (Low! /High!) current value is too low or too high.
- Red: (Hot! /High!) current temperature or value is too high.

26 DISPLAYS

–White: (---) there is no valid value. Instead of the value, dashes **5** are displayed.

 The evaluation of the individual values is possible in part only after a certain riding duration or speed. If a measured value cannot yet be displayed due to unfulfilled measurement conditions, dashes are displayed instead as placeholders. As long as no valid measured value is available, no evaluation is carried out in the form of a colored symbol.

ing the Multi-Controller to the left.

–Check Control messages are dynamically attached as additional tabs to the pages in the menu *My vehicle* ( 87). The message can be called up again as long as the error persists.



Check Control dialog

Messages are output as Check Control dialog **1**.

–If several Check Control messages of the same priority are present, the messages change in the order in which they occur, until they are acknowledged.

–If the symbol **2** is active, this can be acknowledged by tilt-

Overview of warning indicators

Indicator and warning lights	Display text	Meaning
	 is displayed.	Outside temperature warning (▣▣▣ 32)
 lights up yellow.	 Remote key not in range.	Key remote outside of the reception area (▣▣▣ 32)
 lights up yellow.	 Remote key battery at 50%.	Replacing the battery of the key fob transmitter (▣▣▣ 33)
	 Remote key battery low.	
 lights up yellow.	 is displayed in yellow.	Vehicle voltage too low (▣▣▣ 33)
	 Vehicle voltage low.	
 lights up red.	 is displayed in red.	Vehicle voltage critical (▣▣▣ 33)
	 Vehicle voltage critical!	
 lights up red.	 is displayed in red.	Charging voltage critical (▣▣▣ 34)
	 Vehicle voltage critical!	
 lights up yellow.	 The faulty light source is displayed.	Light source defect (▣▣▣ 34)
	 Anti-theft alarm batt. capacity low.	Anti-theft alarm battery low charge (▣▣▣ 35)
 lights up yellow.	 Anti-theft alarm battery discharged.	Anti-theft alarm battery discharged (▣▣▣ 36)

28 DISPLAYS

Indicator and warning lights	Display text	Meaning
	 Engine oil level. Check engine oil level.	Electronic oil-level check: check engine oil level. (▣▣▣ 36)
 lights up red.	 Coolant temperature too high!	Coolant temperature too high (▣▣▣ 37)
	 Engine!	Drive malfunction (▣▣▣ 38)
 flashes red.		Severe drive malfunction (▣▣▣ 38)
 lights up yellow.	 No communication with engine control.	Engine control failure (▣▣▣ 38)
 lights up yellow.	 Fault in the engine control.	Engine in emergency-operation mode (▣▣▣ 38)
 flashes yellow.	 Serious fault in the engine control.	Serious fault in the engine control (▣▣▣ 39)
 lights up yellow.	 Displayed in yellow.	Tire pressure at the limits of the permissible tolerance (▣▣▣ 41)
	 Tire pressure not at set-point.	
 flashes red.	 Displayed in red.	Tire pressure is outside the approved tolerance range (▣▣▣ 41)
	 Tire pressure not at set-point.	
	 Tire Press. Monitor. Loss of pressure.	

Indicator and warning lights	Display text	Meaning
	 "----"	Transmission fault (▶▶▶▶ 42)
 lights up yellow.	 "----"	Sensor faulty or system fault (▶▶▶▶ 43)
 lights up yellow.	 TPM sensors battery low.	Battery of the tire pressure sensor weak (▶▶▶▶ 43)
	 Fall sensor faulty.	Fall sensor defective (▶▶▶▶ 43)
	 Cannot start engine.	Motorcycle has fallen over (▶▶▶▶ 43)
	 Side stand monitoring faulty	Side stand monitoring faulty (▶▶▶▶ 44)
 flashes.		ABS self-diagnosis not completed (▶▶▶▶ 44)
 lights up.	 Limited ABS availability!	ABS fault (▶▶▶▶ 44)
 lights up.	 ABS failure!	ABS failure (▶▶▶▶ 45)
 lights up.	 ABS Pro failure!	ABS Pro failure (▶▶▶▶ 45)
 flashes rapidly.		ASC/DTC intervention (▶▶▶▶ 45)
 flashes slowly.		ASC/DTC self-diagnosis not completed (▶▶▶▶ 46)

30 DISPLAYS

Indicator and warning lights	Display text	Meaning
 lights up.	 Off!	ASC/DTC switched off ( 46)
	 Traction control deactivated.	
 lights up.	 Traction control limited.	Limited ASC/DTC availability ( 46)
 lights up.	 Traction control failure!	ASC/DTC error ( 47)
 lights up yellow.	 Spring strut adjustment faulty!	D-ESA fault ( 47)
	 Fuel down to reserve. Drive to the nearest filling station	Fuel down to reserve volume ( 48)
	 Green stop symbol is displayed.	Hill Start Control active ( 48)
	 Yellow stop symbol flashes.	Hill Start Control is automatically deactivated ( 48)
	 Crossed-out stop symbol is displayed.	Hill Start Control cannot be activated ( 48)
	 The gear indicator flashes.	Gear not trained ( 49)
 flashes in green.		Hazard warning lights system switched on ( 49)
 flashes in green.		

Indicator and warning lights	Display text	Meaning
	 is displayed in white.	Service due (▶ 50)
 lights up yellow.	 is displayed in yellow.	Service date missed (▶ 50)
	Service over-due!	

32 DISPLAYS

Outside temperature

The outside temperature is displayed in the status line of the TFT display.

Engine heat can lead to spurious readings the outside temperature when the motorcycle is stationary. If the effect of the engine heat becomes excessive, dashes are temporarily displayed instead of the value.



If the outside temperature falls below the following limit value, there is a risk of black ice formation.



Limit range for outside temperature

Approx. 37 °F (Approx. 3 °C)

The first time the temperature drops below this value, the outside temperature display and ice crystal symbol will flash in the status line of the TFT display.

Outside temperature warning



is displayed.

Possible cause:



The outside temperature measured on the motorcycle is less than:

Approx. 37 °F (Approx. 3 °C)



WARNING

Risk of black ice, even above 37 °F (3 °C)

Accident hazard

- At a low outside temperature, icy conditions must be expected on bridges and in shady road areas.

- Think well ahead when driving.

Key remote outside of the reception area

—with Keyless Ride^{OE}



lights up yellow.



Remote key not in range. It is not possible to turn on the ignition again.

Possible cause:

The communication between the key remote and the engine electronics is faulty.

- Check the battery in the key remote.
- with Keyless Ride^{OE}
- Replacing the battery of the key fob transmitter (▮▮▮ 59).
- Use the spare key for further travel.

—with Keyless Ride^{OE}

- If radio-operated key is lost (▮▮▮ 58).

- If the Check Control dialog appears while riding, remain calm. You can continue riding, the engine will not turn off.
- Have any faulty key remotes replaced by a BMW Motorrad partner.

Replacing the battery of the key fob transmitter

 lights up yellow.

 Remote key battery at 50%. No functional limitation.

 Remote key battery low. Limited central locking function. Change battery.

Possible cause:

- The battery for the key fob transmitter is no longer charged to full capacity. Operation of the key fob transmitter is only ensured for a limited time.
–with Keyless Ride^{OE}
- Replacing the battery of the key fob transmitter (➔ 59).

Vehicle voltage too low

 lights up yellow.

 is displayed in yellow.

 Vehicle voltage low. Switch off unneeded consumers.

The vehicle voltage is too low. If you continue riding, the vehicle electronics will discharge the battery.

Possible cause:

Consumers with high electrical consumption, e.g. heating vests, are in operation; too many consumers are in operation at the same time, or the battery is defective.

- Switch off consumers that are not needed or disconnect them from the electrical system.
- If the malfunction persists or occurs without any consumers connected, have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Vehicle voltage critical

 lights up red.

 is displayed in red.

 Vehicle voltage critical! Consumers were switched off. Check battery condition.

34 DISPLAYS



WARNING

Failure of vehicle systems

Accident hazard

- Do not continue riding.

The vehicle voltage is critical. If you continue riding, the vehicle electronics will discharge the battery.

Possible cause:

Consumers with high electrical consumption, e.g. heating vests, are in operation; too many consumers are in operation at the same time, or the battery is defective.

- Switch off consumers that are not needed or disconnect them from the electrical system.
- If the malfunction persists or occurs without any consumers connected, have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Charging voltage critical



lights up red.



is displayed in red.



Vehicle voltage critical! Battery is not charged. Check battery condition.



WARNING

Failure of vehicle systems

Accident hazard

- Do not continue riding.

The battery is not being charged. If you continue riding, the vehicle electronics will discharge the battery.

Possible cause:

Alternator or alternator drive faulty, battery faulty or fuse for alternator regulator blown.

- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

Light source defect



lights up yellow.



The faulty light source is displayed:



High beam faulty!



Turn indicator front left faulty! or Turn indicator front right faulty!



Low beam faulty!



Front parking lamp faulty!

–with LED additional headlight^{OA}



Left auxiliary headlight faulty!
or Right auxiliary headlight faulty!<



Tail light faulty!



Brake light faulty!



Rear left turn signal faulty! or
Rear right turn signal faulty!



License plate light faulty!

–Have checked by a specialist workshop.



WARNING

Overlooking the vehicle in traffic due to a defective light source on the vehicle

Safety risk

- Replace defective bulbs as soon as possible; it is best always to carry a complete set of spare bulbs on the motorcycle.

Possible cause:

One or more lights are faulty.

- Identify faulty lights by visually inspecting them.
- Replace LED headlights (→ 181).
- Replacing front and rear turn indicator light sources (→ 180).
- Replacing LED tail light (→ 181).

Anti-theft alarm battery low charge

–with anti-theft alarm system (DWA)^{OE}



Anti-theft alarm batt. capacity low. No limitations. Arrange an appointment at a specialist workshop.



This fault message is only shown for a short time immediately following the Pre-Ride-Check.

Possible cause:

- The anti-theft alarm battery no longer has its full capacity. The operation of the anti-theft alarm system is only ensured for a limited time with the motorcycle battery disconnected.
- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

36 DISPLAYS

Anti-theft alarm battery discharged

–with anti-theft alarm system (DWA)^{OE}



lights up yellow.



Anti-theft alarm battery discharged. No independent alarm. Arrange an appointment at a specialist workshop.



This fault message is only shown for a short time immediately following the Pre-Ride-Check.

Possible cause:

The anti-theft alarm system battery is completely discharged. Operation of the anti-theft alarm system is no longer ensured when the motorcycle's battery is disconnected.

• Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

Electronic oil-level check



The electronic oil-level check evaluates the oil level in the engine as OK or Low!

The following conditions must be satisfied in order to use the electronic oil-level check; multiple measurements may be necessary:

- Rider is sitting on the motorcycle and the motorcycle has been ridden at a speed of at least 10 km/h beforehand.
- Engine idling for at least 20 seconds.
- Engine is at operating temperature.
- Motorcycle stands vertically on a level surface.
- Side (prop) stand is retracted and motorcycle is not resting on a center stand.
- The spring strut is set according to the load status, or D-ESA is in the Auto loading mode.

If the measurement is incomplete or the conditions specified above are not fulfilled, an assessment of the oil level is not possible. Dashes (---) are indicated in place of the note.

Electronic oil-level check: check engine oil level.



Engine oil level. Check engine oil level.

Possible cause:

The electronic oil level sensor has detected a low engine oil level. If the motorcycle is not standing vertically on a level surface, the message can also appear even when the oil level is correct. At next refueling stop:

- Checking engine oil level (▣▣▣▣▶ 162).

If the oil level is too low in the inspection glass:

- Topping up the engine oil (▣▣▣▣▶ 163).

If the oil level is correct:

- Check whether the conditions for the electronic oil level check are fulfilled.

If the note appears multiple times even though the oil level is slightly below the MAX mark:

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

Coolant temperature too high



lights up red.



Coolant temperature too high! Check coolant level. Carry on at moderate pace to cool.



ATTENTION

Riding with overheated engine

Engine damage

- Be sure to observe the measures listed below.

Possible cause:

Coolant level is too low.

- Checking coolant level (▣▣▣▣▶ 168).

If coolant level is too low:

- Let the engine cool down.
- Topping up coolant (▣▣▣▣▶ 169).
- Have the coolant system checked at a specialist workshop, preferably by an authorized BMW Motorrad retailer.

Possible cause:

The coolant temperature is too high.

- If possible, continue driving in the part-load range to cool down the engine.

If the coolant temperature is frequently too high:

- Have the fault corrected as soon as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.

38 DISPLAYS

Drive malfunction

 Engine! Have checked by a specialist workshop.

Possible cause:

The engine control unit has diagnosed a fault which affects the pollutant emissions.

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.
- » You may continue to drive if the pollutant emission is above the setpoint values.

Severe drive malfunction

 flashes red.

Possible cause:

The engine control unit has diagnosed a fault which can lead to damage of the exhaust system.

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.
- » Continued riding is possible, however it is not recommended.

Engine control failure

 lights up yellow.

 No communication with engine control. Multiple sys. affected. Ride carefully to the next specialist workshop

Engine in emergency-operation mode

 lights up yellow.

 Fault in the engine control. Onward journey possible. Ride carefully to next specialist workshop.

WARNING

Unusual handling when the engine is in emergency operation

Accident hazard

- Avoid rapid acceleration and passing maneuvers.

Possible cause:

The engine control unit has diagnosed a fault which impairs the engine performance or throttle response. The engine is running in the emergency-operation mode. In exceptional cases, the engine stops and can no longer be started.

- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.
- » It is possible to continue riding, however the engine performance and engine speed range may be impaired and not function as normal.

Serious fault in the engine control



flashes yellow.



Serious fault in the engine control. Onward journey possible. Damage possible. Have checked by a workshop.



WARNING

Damage to engine during emergency operation

Accident hazard

- Drive slowly and avoid rapid acceleration and passing maneuvers.
- If possible, have the vehicle picked up and the fault eliminated at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Possible cause:

The engine control unit has diagnosed a fault, which can lead to a severe secondary fault.

The engine is in the emergency-operation mode.

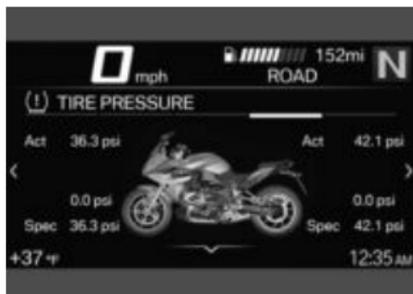
- Continued driving is possible, however it is not recommended.
- Avoid high load and engine speed ranges if possible.
- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

Tire inflation pressure

—with tire pressure monitor (TPM)^{OE}

The TIRE PRESSURE page is used to display tire pressures as well as the MY VEHICLE menu page and the Check Control messages:

40 DISPLAYS



The values on the left relate to the front wheel and the values on the right relate to the rear wheel.

The pressure differential is displayed via the actual and nominal tire pressure.

Immediately after switching on the ignition only dashes are displayed. The transfer of the tire pressure values does not begin until the minimum speed is exceeded for the first time:



RDC sensor is not active

min 19 mph (min 30 km/h)
(The RDC sensor does not transmit a signal to the motorcycle until this minimum speed has been exceeded.)



The tire pressures are shown in the TFT display with temperature compensation and are always based on the following tire air temperature:

68 °F (20 °C)



If the tire symbol appears yellow or red at the same time, the display is a warning. The pressure differential is highlighted with an exclamation mark of the same color.



If the level concerned is borderline in terms of the permissible tolerance, the general warning light also lights up yellow.



If the monitored tire inflation pressure is outside the specified range the general warning light will flash red.

For further information about the BMW Motorrad tire pressure monitor, see the Technology in detail chapter from page (150).

Tire pressure at the limits of the permissible tolerance

–with tire pressure monitor (TPM)^{OE}



lights up yellow.



Displayed in yellow.



Tire pressure not at setpoint. Check tire pressure.

Possible cause:

The measured tire pressure is within the limit range of the permissible tolerance.

- Correct tire pressure.
- Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the Technology in detail chapter:
 - » Temperature compensation (▮▮▮▮▶ 150)
 - » Tire pressure adjustment (▮▮▮▮▶ 151)
 - » The target tire pressures can be found in the following locations:

–On the back cover of the rider's manual

–Instrument cluster in the TIRE PRESSURE view

–Sign underneath the seat

Tire pressure is outside the approved tolerance range

–with tire pressure monitor (TPM)^{OE}



flashes red.



Displayed in red.



Tire pressure not at setpoint. Stop immediately! Check tire pressure.



Tire Press. Monitor. Loss of pressure. Stop immediately! Check tire pressure.



WARNING

Tire pressure is outside the approved tolerance range.

Risk of accident, deterioration in the handling characteristics of the vehicle.

- Adjust the driving style.

Possible cause:

The measured tire pressure is outside of the permissible tolerance.

- Check the tires for damage and driveability.

Can the tire still be driven on:

- Correct the tire pressure at the next opportunity.

42 DISPLAYS

- Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the Technology in detail chapter:

» Temperature compensation (150)

» Tire pressure adjustment (151)

» The target tire pressures can be found in the following locations:

– On the back cover of the rider's manual

– Instrument cluster in the TIRE PRESSURE view

– Sign underneath the seat

- Have the tires checked by a specialist workshop for damage, preferably an authorized BMW Motorrad retailer.

In the event of uncertainty about the driveability of the tire:

- Do not continue riding.
- Inform roadside assistance.

Transmission fault

– with tire pressure monitor (TPM)^{OE}



"---"

Possible cause:

The motorcycle has not reached the minimum speed (150).



RDC sensor is not active

min 19 mph (min 30 km/h)
(The RDC sensor does not transmit a signal to the motorcycle until this minimum speed has been exceeded.)

- Observe the TPM display at higher speed.



This is a permanent fault only when the general warning light also lights up. In this case:

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

The radio link to the TPM sensors is disrupted. There are radio systems in the surrounding area that are causing interference to the connection between the TPM control unit and the sensors.

- Observe the TPM display in different surroundings.



This is a permanent fault only when the general warning light also lights up. In this case:

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Sensor faulty or system fault

–with tire pressure monitor (TPM)^{OE}



lights up yellow.



"----"

Possible cause:

Wheels without installed TPC/RDC sensors are mounted.

- Retrofit wheel set with TPM sensors.

Possible cause:

1 or 2 TPM sensors have failed or there is a system fault.

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Battery of the tire pressure sensor weak

–with tire pressure monitor (TPM)^{OE}



lights up yellow.



TPM sensors battery low. Function limited. Have checked by a specialist workshop.



This fault message is only shown for a short time immediately following the Pre-Ride-Check.

Possible cause:

The battery for the tire pressure sensor is no longer charged to full capacity.

Operation of the tire pressure control is only ensured for a limited time.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

Fall sensor defective



Fall sensor faulty. Have checked by a specialist workshop.

Possible cause:

The fall sensor is not functioning.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

Motorcycle has fallen over



Cannot start engine. Stand motorcycle upright. Switch ignition on/off. Start the engine.

44 DISPLAYS

Possible cause:

The fall sensor has detected a fall and switched off the engine.

- Raise the motorcycle to upright position and check for possible damage.
- Switch ignition off and then on again or switch emergency-off switch on and then off again.

Side stand monitoring faulty

 Side stand monitoring faulty. Onward journey possible. Stop engine when stationary! Have checked by workshop.

Possible cause:

The side-stand switch or its wiring is damaged. The engine is switched off when the speed falls below 5 km/h, and the ride cannot be resumed.

- Contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS self-diagnosis not completed

 flashes.

Possible cause:



ABS self-diagnosis routine not completed

ABS is not available, as the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel speed sensors: 3 mph (5 km/h))

- Ride off slowly. Please note that the ABS function is only available after the self-diagnosis has completed.

ABS fault

 lights up.

 Limited ABS availability! Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:

The ABS control unit has detected an error. The partial integral brake and the Dynamic Brake Control function have failed. The ABS function is limited.

- It remains possible to continue riding. Take note of additional information on special

conditions that can lead to an ABS fault message (▮▮▮▮ 142).

- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS failure



lights up.



ABS failure! Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:

The ABS control unit has detected an error. The ABS function is not available.

- It remains possible to continue riding. Take note of additional information on special conditions that can lead to an ABS fault message (▮▮▮▮ 142).
- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS Pro failure

—with riding modes Pro^{OE}



lights up.



ABS Pro failure! Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:

The monitoring of the ABS Pro function has detected a fault.

The ABS Pro function is not available. The ABS function remains available. ABS only supports braking in straight-ahead riding.

- You may continue riding. Take note of additional information on special situations which can lead to an ABS Pro fault memory entry (▮▮▮▮ 142).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

ASC/DTC intervention



flashes rapidly.

ASC/DTC has detected instability at the rear wheel and responded by reducing the torque. The indicator and warning light flashes longer than the ASC/DTC intervention lasts. This feature continues to furnish the rider with visual

46 DISPLAYS

feedback confirming that the system has initiated active closed-loop intervention even after the critical situation has passed.

ASC/DTC self-diagnosis not completed

 flashes slowly.

Possible cause:

 ASC/DTC self-diagnosis routine not completed

The ASC/DTC function is not available, as the self-diagnosis function has not been completed. (To check wheel speed sensors, motorcycle must reach a minimum speed with engine running: min 3 mph (min 5 km/h))

- Ride off slowly. The ASC/DTC indicator and warning light must go out after a few meters.

If the ASC/DTC indicator and warning light continues flashing:

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

ASC/DTC switched off

 lights up.

 Off!

 Traction control deactivated.

Possible cause:

The ASC/DTC system was deactivated by the rider.

- Switching the ASC/DTC function on ( 64).

Limited ASC/DTC availability

 lights up.

 Traction control limited. Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:

The ASC/DTC control unit has detected a fault.

ATTENTION

Damage to components

Damage to sensors, for example, with the resultant malfunctions

- Do not carry along any objects under the rider's or passenger's seat.
- Secure vehicle tools.

- Do not damage the rotational speed sensor.
 - It must be noted that only limited ASC/DTC function is available.
 - You may continue riding. Observe additional information on situations that can lead to a ASC/DTC fault (▶▶▶ 144).
 - Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.
- Do not damage the rotational speed sensor.
 - It must be noted that the ASC/DTC function is not available at all or is restricted.
 - It remains possible to continue riding. Observe additional information on situations that can lead to a ASC/DTC fault (▶▶▶ 144).
 - Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

ASC/DTC error



lights up.



Traction control failure! Onward journey possible. Ride carefully to the next specialist workshop.

Possible cause:

The ASC/DTC control unit has detected a fault.



ATTENTION

Damage to components

Damage to sensors, for example, with the resultant malfunctions

- Do not carry along any objects under the rider's or passenger's seat.
- Secure vehicle tools.

D-ESA fault

–with Dynamic ESA^{OE}



lights up yellow.



Spring strut adjustment faulty! Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:

The D-ESA control unit has detected a fault. Damping action and/or the spring adjustment may be the cause. In the Auto loading mode, the cause may be a fault in the function of the riding position compensation. In this state, the motorcycle is probably heavily damped and is uncomfortable to drive, partic-

48 DISPLAYS

ularly on poor roadways. Alternatively, the spring setting may be set incorrectly.

- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

Fuel down to reserve volume



Fuel down to reserve.
Drive to the nearest filling station.



WARNING

Rough engine running or switching off of the engine due to a fuel shortage

Accident hazard, damage to catalytic converter

- Do not drive to the extent that the fuel tank is completely empty.

Possible cause:

At the most, the fuel tank still contains the reserve fuel quantity.



Fuel reserve

Approx. 1.1 gal (Approx. 4 l)

- Refueling procedure (➡ 131).

Hill Start Control active



Green stop symbol is displayed.

Possible cause:

The Hill Start Control (➡ 153) was activated by the rider.

- Switch off Hill Start Control.
- Operating the Hill Start Control (➡ 73).

Hill Start Control is automatically deactivated



Yellow stop symbol flashes.

Possible cause:

Hill Start Control was deactivated automatically.

- Side stand was folded out.
» Hill Start Control is deactivated when the side stand is folded out.
- Engine was stopped.
» Hill Start Control is deactivated when the engine is stopped.
- Operating the Hill Start Control (➡ 73).

Hill Start Control cannot be activated



Crossed-out stop symbol is displayed.

Possible cause:

The Hill Start Control can not be activated.

- Fold in side stand.
- » Hill Start Control only functions when the side stand is folded in.
- Start engine.
- » Hill Start Control only functions with the engine running.

Gear not trained

—with Gearshift Assistant Pro^{OE}

N The gear indicator flashes. The Gear Shift Assistant Pro has no function.

Possible cause:

—with Gearshift Assistant Pro^{OE}

The transmission sensor has not been completely trained.

- Engage idle position **N** and allow the engine to run for at least 10 seconds while parked to train the idle position.
- Shift all gears with clutch control and drive for at least 10 seconds in each engaged gear.
- » The gear indicator stops flashing when the transmission sensor has been successfully trained.
- Once the transmission sensor is fully trained, the gearshift assistant Pro functions as described (▮▮▮▮▶ 151).

- If the training procedure is unsuccessful, have the fault corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Hazard warning lights system switched on

 flashes in green.

 flashes in green.

Possible cause:

The hazard warning lights system was switched on by the rider.

- Operating hazard warning flashers (▮▮▮▶ 62).

Service display

 If service is overdue, the due date or the odometer reading at which service was due is accompanied by the general warning light in yellow.

If service is overdue, a yellow Check Control message is displayed. The displays for service, service appointment, and remaining distance are also highlighted with exclamation marks in the menu windows MY VEHICLE and SERVICE REQUIREMENTS.

50 DISPLAYS

 If the service display appears more than a month before the service date, the current day's date must be re-set in the instrument cluster. This situation can occur if the battery was disconnected.

Service due

 is displayed in white.

Service due! Have a service performed at a specialist workshop.

Possible cause:

Service is due because of the driving performance or the date.

- Have service performed regularly by a specialist workshop, preferably an authorized BMW Motorrad retailer.
- » The operating and road safety of the vehicle remains unchanged.
- » The best-possible value retention of the vehicle is ensured.

Service date missed

 lights up yellow.

 is displayed in yellow.

Service overdue! Have a service performed at a specialist workshop.

Possible cause:

Service is overdue because of the riding performance or the date.

- Have service performed regularly by a specialist workshop, preferably an authorized BMW Motorrad retailer.
- » The operating and road safety of the vehicle remains unchanged.
- » The best-possible value retention of the vehicle is ensured.

OPERATION

04

IGNITION SWITCH/STEERING LOCK	54
IGNITION WITH KEYLESS RIDE	56
EMERGENCY ON/OFF SWITCH (KILL SWITCH)	60
LIGHTS	60
HAZARD WARNING LIGHTS	62
TURN INDICATORS	62
TRACTION CONTROL (ASC/DTC)	63
ELECTRONIC CHASSIS AND SUSPENSION ADJUST- MENT (D-ESA)	64
RIDING MODE	67
PRO RIDING MODE	69
ADAPTIVE CRUISE CONTROL	70
HILL START CONTROL	73
SHIFTPOINT LIGHT	76
ANTI-THEFT ALARM SYSTEM (DWA)	76
TIRE PRESSURE CONTROL (RDC)	79
HEATED GRIPS	79
RIDER SEAT AND PASSENGER SEAT	80

54 OPERATION

IGNITION SWITCH/STEERING LOCK

Ignition keys

You are provided with 2 ignition keys.

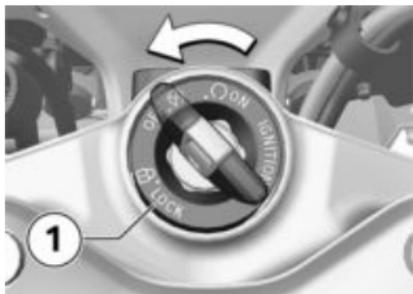
Refer to the notes regarding the electronic immobilizer (EWS) (▮▮▮ 55) should you lose your keys.

A single ignition key fits the ignition switch/steering lock, the fuel filler cap and the seat lock.

The cases and the topcase can also be ordered with locks for the same keys on request. Please contact a specialist workshop for this purpose, preferably a BMW Motorrad retailer.

Locking the steering lock

- Turn handlebars to left.



- Turn the ignition key to position 1 while moving the handlebars somewhat.

- » Ignition, lights and all function circuits switched off.
- » Steering lock is locked.
- » The ignition key can now be removed.

Switching on ignition



- Insert the motorcycle key into the steering and ignition lock. Turn the key to position 1.
 - » Parking light and all function circuits are switched on.
 - with LED additional headlight^{OA}
 - » LED additional headlights are switched on.◀
 - » Pre-Ride-Check is carried out. (▮▮▮ 122)
 - » ABS self-diagnosis is performed. (▮▮▮ 122)
 - » ASC/DTC self-diagnosis is performed. (▮▮ 124)

Switching off the ignition



- Turn the ignition key to position **1**.
 - » After the ignition has been switched off, the instrument cluster remains switched on for a short period of time and indicates possibly present fault memory entries.
 - » Steering lock is not locked.
 - » Electrically powered accessories remain operational for a limited period of time.
 - » Battery can be recharged using the onboard power socket.
 - » The ignition key can now be removed.
- with LED additional headlight^{OA}
- The auxiliary LED headlights go off shortly after the ignition has been switched off.◁

EWS electronic immobilizer

The motorcycle's electronics monitor the data stored in the ignition key through a ring antenna incorporated in the ignition switch/steering lock. The engine control unit does not enable engine start until this ignition key has been recognized as "authorized" for your motorcycle.

 An additional ignition key attached to the same ring as the ignition key used to start the engine could "irritate" the electronics, in which case the enabling signal for the engine start is not issued. Always keep the ignition keys separate from each other.

If you lose an ignition key, you can have it disabled by your authorized BMW Motorrad retailer.

For this purpose, you should also bring all of the motorcycle's remaining ignition keys with you. The engine can no longer be started using a disabled ignition key; however, a disabled ignition key can be enabled again.

Ignition keys can only be obtained from an authorized BMW Motorrad retailer. The keys are part of an integrated

56 OPERATION

safety system, so the retailer is under an obligation to check the legitimacy of all applications for replacement/extra ignition keys.

IGNITION WITH KEY-LESS RIDE

–with Keyless Ride^{OE}

Ignition keys

 The indicator light for the radio-operated key flashes as long as the radio-operated key is being searched for. If the radio-operated key or the spare key is detected, it goes out.

If the radio-operated key or the spare key is not detected, it lights up briefly.

You are provided with one radio-operated key and one spare key. Refer to the notes regarding the electronic immobilizer (EWS) (▶ 55) should you lose your keys.

The ignition, fuel filler cap and anti-theft alarm system are activated with the radio-operated key. The seat lock, topcase and case can be operated manually.

 When the range of the radio-operated key is exceeded (e.g. in case or Top-

case), the vehicle cannot be started.

If the radio-operated key continues to be missing, the ignition is switched off after approx. 1.5 minutes to protect the battery charge.

It is advisable to carry the radio-operated key directly on your person (e.g. in a jacket pocket) and to also carry the spare key as an alternative.

 Range of Keyless Ride radio-operated key

–with Keyless Ride^{OE}

Approx. 3.3 ft (Approx. 1 m)◀

Locking the steering lock Requirement

Handlebars are turned to the left. Key remote is within reception range.



- Press and hold button 1.
- » Steering lock audibly locks.

- » Ignition, lights and all electrical circuits switched off.
- To unlock the steering lock, briefly press button **1**.

Switching on ignition Requirement

Key remote is within reception range.



- The steering lock can be unlocked by switching on the ignition.

Steering lock is locked:

- Press and hold button **1**.
- » Steering lock is unlocked.
- » Parking light and all function circuits are switched on. –with LED additional headlight^{OA}
- » LED additional headlights are switched on.<
- » Pre-Ride-Check is carried out. (▣▣▣▶ 122)
- » ABS self-diagnosis is performed. (▣▣▣▶ 122)
- » ASC/DTC self-diagnosis is performed. (▣▣▶ 124)

Steering lock is unlocked:

- Press button **1** briefly.
- » Parking light and all function circuits are switched on. –with LED additional headlight^{OA}
- » LED additional headlights are switched on.<
- » Pre-Ride-Check is carried out. (▣▣▣▶ 122)
- » ABS self-diagnosis is performed. (▣▣▣▶ 122)
- » ASC/DTC self-diagnosis is performed. (▣▣▶ 124)

Switch off ignition Requirement

Key remote is within reception range.



- The steering lock can be locked by switching off the ignition.

Switch off the ignition and lock the steering lock:

- Turn handlebars to left.
- Press and hold button **1**.
- » Light is switched off.
- » Steering lock is locked.

spare key is positioned over antenna **2**.



Period in which the engine must be started. Then unlocking must be repeated.

30 s

- » Pre-Ride-Check is carried out.
- Spare key has been detected.
- Engine can be started.
- Spare key can be removed.
- Start the engine (▶▶▶ 121).

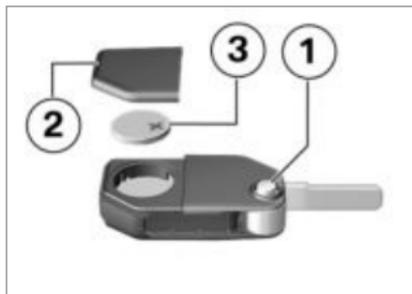
Replacing the battery of the key fob transmitter

If the radio key does not respond when a button is pressed for a short or long time:

- The battery for the key remote is not charged to full capacity.



Remote key battery low. Limited central locking function. Change battery.



- Press button **1**.

- » Key bit folds open.
- Press battery cover **2** upward.
- Remove battery **3**.
- Dispose of the old battery in accordance with legal regulations. Do not dispose of the battery in the household waste.



ATTENTION

Unsuitable or improperly inserted batteries

Component damage

- Use a battery compliant with the manufacturer's specifications.
 - When inserting the battery, make sure that the polarity is correct.
- Insert the new battery with the positive terminal up.



Battery type

For Keyless Ride radio-operated key

CR 2032

- Install battery cover **2**.
- » Red LED in instrument panel flashes.
- » The key fob transmitter is working again.

60 OPERATION

EMERGENCY ON/OFF SWITCH (KILL SWITCH)



- 1 Emergency on/off switch (kill switch)



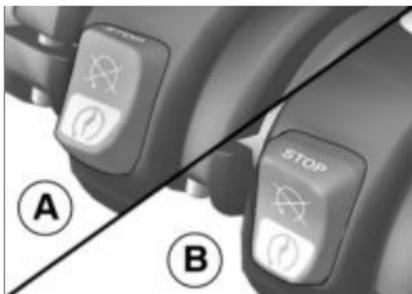
WARNING

Operation of the emergency ON/OFF switch when riding

Danger of falling due to blocking of rear wheel

- Do not operate the emergency ON/OFF switch when riding.

The engine can be switched off easily and quickly using the emergency on/off switch.



- A Engine is switched off
B Operating position

LIGHTS

Low-beam headlight and parking lights

The parking lights come on automatically when the ignition is switched on.

 The parking lights are a strain on the battery. Do not leave the ignition switched on longer than absolutely necessary.

The low-beam headlight switches on automatically when the engine is started.

High-beam headlight and headlight flasher

- Switching on ignition (▶▶▶ 54).



- Press switch **1** toward front to switch on high beam.
- Pull switch **1** toward rear to actuate headlight flasher.

Headlight courtesy delay feature

- Switch off ignition.



- Immediately after turning off the ignition, pull switch **1** back and hold until the headlight courtesy delay feature turns on.
- » The vehicle lights light up for one minute and then turn off automatically.
- This can be used after parking the vehicle in order to illumi-

nate the path to the house door, for instance.

Parking lights

- Switching off the ignition (→ 55).



- Immediately after switching off the ignition, push button **1** to left and hold it until the parking lamps come on.
- Switch ignition on and then off again to switch off parking light.

Additional headlight

–with LED additional headlight^{OA}

Requirement

The additional high-beam headlights are only active when the low-beam headlight is active.

 The auxiliary headlights are approved for use as fog lights and may only be used in poor weather condi-

62 OPERATION

tions. Comply with the country-specific road traffic regulations.

- Start the engine (➡ 121).



- Press button **1** to switch on the additional high-beam headlights.

 The indicator light for the additional headlight lights up.

- Press button **1** again to switch off the additional high-beam headlights.

HAZARD WARNING LIGHTS

Operating hazard warning flashers

- Switching on ignition (➡ 54).

 The hazard warning flashers place a strain on the battery. Do not use the hazard warning flashers for longer than absolutely necessary.



- Press button **1** to switch on the hazard warning lights system.

» Ignition can be switched off.

- To switch off the hazard warning lights system, switch on the ignition, as required, and press button **1** once again.

TURN INDICATORS

Operating turn signals

- Switching on ignition (➡ 54).



- Press button **1** to left to switch on left-side turn signals.

- Press button **1** to right to switch on right-side turn signals.
- Move button **1** to center position to switch off turn signals.

Comfort turn signals



When button **1** is pressed to the right or left, the turn signal automatically turns off under the following conditions:

- Speed is under 18 mph (30 km/h): after traveling a distance of 165 ft (50 m).
- Speed is between 18 mph and 60 mph (30 km/h and 100 km/h): after covering a particular distance depending on the speed or when accelerating.
- Speed is above 60 mph (100 km/h): after turn signal flashes five times.

When button **1** is pressed and held slightly longer to the right or left, the turn signals will only turn off automatically after

reaching the distance depending on the speed.

TRACTION CONTROL (ASC/DTC)

Switching the ASC/DTC function off

- Switching on ignition (➡ 54).

 The ASC/DTC function can also be deactivated while you are riding.



- Press and hold button **1** until the ASC/DTC indicator and warning light changes its display behavior. Immediately after pressing button **1**, the ASC/DTC system status **ON** is displayed.

 lights up.

Possible ASC/DTC system status **OFF!** is displayed.

- Release button **1** after the ASC/DTC system status switches.

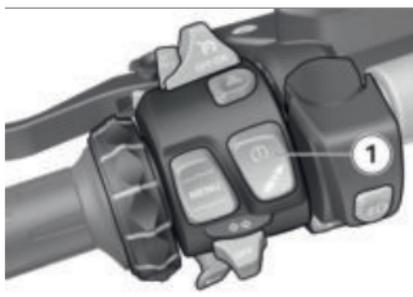
64 OPERATION

The new ASC/DTC system status OFF! is displayed briefly.

 continues to light up.

» The ASC/DTC function is switched off.

Switching the ASC/DTC function on



• Press and hold button **1** until the ASC/DTC indicator and warning light changes its display behavior.

Immediately after pressing button **1**, the ASC/DTC system status OFF! is displayed.

 goes out, and if self-diagnosis has not been completed, it begins to flash.

Possible ASC system status ON is displayed.

• Release button **1** after changeover of the status.

 ASC indicator and warning light remains off or continues to flash.

Possible ASC/DTC system status ON is displayed.

» The ASC/DTC function is switched on.

–without riding modes Pro^{OE}

• Alternatively, turn the ignition off and on again.<

–with riding modes Pro^{OE}

• If the coding plug is not installed, the ignition can also be switched off and then on again as an alternative.

• More information about traction control (ASC/DTC) can be found in the "Technology in detail" chapter:

» How does traction control work? (➡ 143)<

ELECTRONIC CHASSIS AND SUSPENSION ADJUSTMENT (D-ESA)

Dynamic ESA adjustment options

–with Dynamic ESA^{OE}

The Dynamic ESA electronic chassis setting can automatically adapt your motorcycle to the load. If the spring setting is set to *Auto*, the rider does not have to worry about adjusting the load.

More information about Dynamic ESA can be found

in the Technology in detail chapter (➡ 146).

Available damping modes

–For road use: Road and Dynamic

Available load settings

- Fixed minimum spring setting: Min
- Active riding position compensation with automatic spring setting: Auto
- Fixed maximum spring setting: Max

 BMW Motorrad recommends the *Auto* chassis and suspension adjustment.

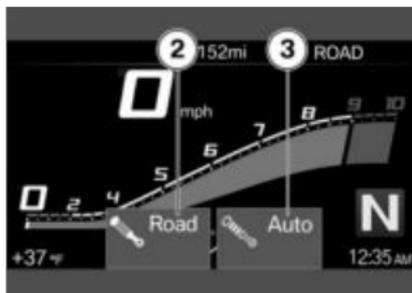
Display suspension setting

–with Dynamic ESA^{OE}

- Switching on ignition (➡ 54).



- Press button **1** briefly to display current setting.



Immediately after the button **1** is pressed, the chassis and suspension adjustments options for damping **2** and spring setting **3** are displayed.

» The display automatically disappears again after a short time.

Adjusting damping

–with Dynamic ESA^{OE}

- Switching on ignition (➡ 54).



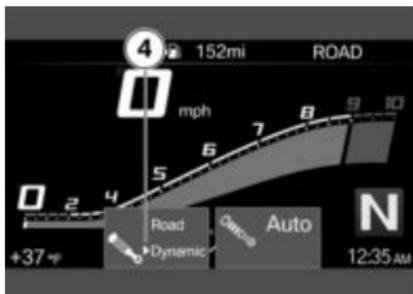
- Press button **1** briefly to display current setting.

66 OPERATION

To adjust the damping rate:

- Repeatedly press button **1** briefly until the desired setting is displayed.

 The damping cannot be adjusted while the motorcycle is being ridden.



The selection arrow **4** is displayed.

» The selection arrow **4** goes away after the changeover of the status.

The following settings are available:

–Road: damping for comfortable road travel

–Dynamic: damping for dynamic road travel

- At very low temperatures, unload the motorcycle before increasing the spring setting, and have the passenger dismount if necessary.

» The chassis and suspension setting display goes away

once the adjustment procedure has been completed.

» In the loading mode *Auto*, the spring setting is only adjusted after riding off.

Adjusting spring preload

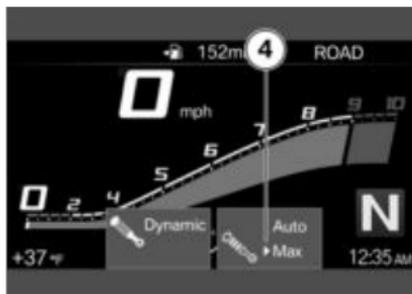


To adjust the spring preload:

- Start the engine (▶▶ 121).
- Repeatedly press and hold button **1** until the desired setting is displayed.

 The spring setting cannot be changed while the motorcycle is underway.

The following message is displayed if no setting is possible: Load adjust. only avail. when halted.



The selection arrow **4** is displayed.

» The selection arrow **4** goes away after the changeover of the status.

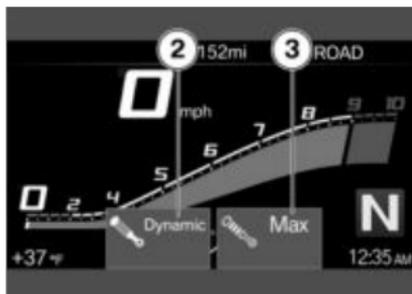
The following settings are available:

-Min: Minimum spring setting (only suitable for one-up mode)

-Auto: Automatic spring setting (recommended chassis and suspension adjustment)

-Max: Maximum spring setting (only suitable for two-up mode)

» If the button **1** is not pressed for an extended period, the damping action and the spring preload will be adjusted to the displayed settings.



The new chassis and suspension adjustment options for damping **2** and spring setting **3** are displayed for a short period of time.

• At very low temperatures, unload the motorcycle before increasing the spring preload, and have the passenger dismount if necessary.

» The chassis and suspension setting display goes away once the adjustment procedure has been completed.

» In the *Auto* loading mode, the spring preload is only adjusted after riding off.

RIDING MODE

Use of the riding modes

BMW Motorrad has developed riding scenarios for your motorcycle from which you can select the one matching your situation:

68 OPERATION

Series

–RAIN: Riding on rain-slicked roads.

–ROAD: Riding on dry roads.

–with riding modes Pro^{OE}

With pro riding modes

–DYNAMIC: Dynamic riding on dry roads.

–DYNAMIC PRO: Dynamic riding on dry roads, taking account of the settings by the driver.

The optimum interaction between engine characteristics, ABS control, and ASC/DTC control is provided for each of these scenarios.

–with Dynamic ESA^{OE}

The chassis and suspension adjustments can also be adapted in the selected scenario.

More detailed information about the riding modes can be found in the "Technology in detail" chapter (➔ 147).

Select riding mode

• Switching on ignition (➔ 54).



• Press button 1.



The active riding mode 2 fades into the background and the first selectable riding mode 3 is displayed. The guide 4 shows how many riding modes are available.



- Press button **1** repeatedly until the desired riding mode is shown.

The following riding modes can be selected:

- RAIN: For riding on rain-slicked roads.
- ROAD: For riding on dry roads.

–with riding modes Pro^{OE}

The following riding mode can also be selected:

- DYNAMIC: For dynamic riding on dry roads.◀

» When the motorcycle is at a standstill, the selected riding mode is activated after approx. 2 seconds.

» The new riding mode is activated while the motorcycle is in motion under the following conditions:

- The throttle grip is in neutral.
- Brake is not engaged.
- Adaptive cruise control is not active.

» The riding mode selected and its associated engine

characteristic, ASC, DTC and Dynamic ESA settings are retained even after the ignition has been switched off.

PRO RIDING MODE

–with riding modes Pro^{OE}

Adjustment options

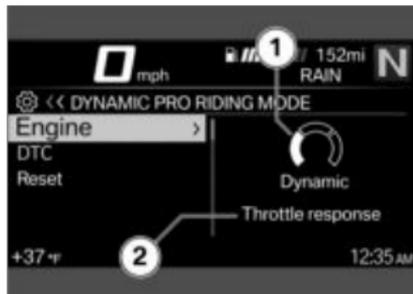
The PRO riding modes can be adjusted individually.

Setting up the PRO riding mode

- Switching on ignition (▶▶ 54).
- Go to Settings, Vehicle settings menu.
- » The following PRO riding mode can be adjusted:
 - DYNAMIC PRO riding mode
 - Select and confirm the riding mode.

Setting Dynamic Pro

- with riding modes Pro^{OE}
- Setting up the PRO riding mode (▶▶ 69).



The Engine system is selected. The current setting is

70 OPERATION

displayed as a diagram 1 with explanations on the system 2.

- Select and confirm the system.



You can browse through the possible settings 3 and the related descriptions 4.

- Adjust the system.
 - » The Engine and DTC systems can also be set in the same way. More detailed information about the riding modes can be found in the chapter "Technology in detail":

» Selection (▣▣▣ 147)

- The settings can be reset to factory settings:
- Resetting the riding mode settings (▣▣▣ 70).

Resetting the riding mode settings

- Setting up the PRO riding mode (▣▣▣ 69).
- Select **Reset** and confirm.

- » The following factory settings apply for DYNAMIC PRO RIDING MODE:
 - DTC: Dynamic
 - ENGINE: Dynamic

ADAPTIVE CRUISE CONTROL

-with speed control^{OE}

Display while adjusting (Speed Limit Info not active)



The icon 1 for adaptive cruise control is displayed in the Pure Ride view and in the upper status line.

Display while adjusting (Speed Limit Info active)



The icon 1 for adaptive cruise control is displayed in the

Pure Ride view and in the upper status line.

Switching on the adaptive cruise control



- Slide switch **1** to the right.
- » Button **2** is unlocked.

Storing speed



- Briefly push button **1** forward.



Adjustment range of the adaptive cruise control

12...130 mph (20...210 km/h)



The indicator light for adaptive cruise control illuminates.

- » The motorcycle maintains your current cruising speed and the setting is saved.

Accelerating



- Briefly push button **1** forward.
- » Speed is increased by 1 mph (1.6 km/h) each time the button is pressed.
- Press button **1** forward and hold.
- » The speed increases continuously.
- » If button **1** is no longer pressed, the speed reached is maintained and saved.

Decelerating



- Briefly press button **1** backward.

72 OPERATION

- » Speed is reduced by 1 mph (1.6 km/h) each time the button is pressed.
- Press button **1** back and hold.
 - » The speed is reduced continuously.
 - » If button **1** is no longer pressed, the speed reached is maintained and saved.

Deactivating the adaptive cruise control

- Actuate the brakes, coupling or throttle grip (ease the throttle beyond the default setting) to deactivate the adaptive cruise control.
-  When downshifting using the Pro Gear Shift Assistant, the adaptive cruise control is automatically deactivated for safety reasons.
-  During ASC/DTC interventions, the adaptive cruise control is automatically deactivated for safety reasons.
- » The indicator light for adaptive cruise control goes out.

Resuming previous cruising speed



- Briefly push button **1** back to return to the speed saved beforehand.
-  Cruise control is not deactivated by accelerating. If you release the throttle grip, the motorcycle will decelerate only to the cruising speed saved in memory, even though you might have wanted to slow down to a lower speed.
-  The indicator light for adaptive cruise control illuminates.

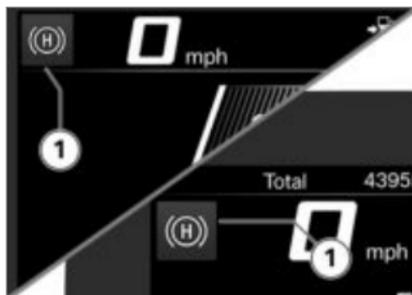
Switching off the adaptive cruise control



- Push switch **1** to the left.
- » The system is switched off.
- » Button **2** is locked.

HILL START CONTROL

Display



The icon **1** for the Hill Start Control is displayed in the Pure Ride view and in the upper status line.

Operating the Hill Start Control Requirement

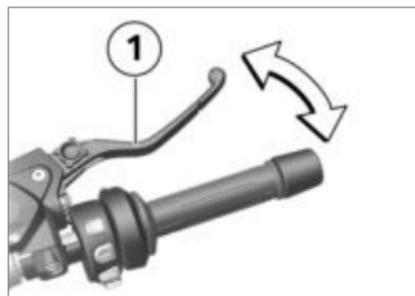
Vehicle is at a standstill with engine running.

ATTENTION

Failure of the drive-off assistant

- Risk of accident
- Secure the vehicle through manual braking.

 Hill Start Control is only a convenience system for easier hill-starting and should, therefore, not be confused with a parking brake.



- Apply handbrake lever **1** or footbrake lever firmly and then release again.
-  Green stop symbol is displayed.

» Hill Start Control is activated.

- To switch off the Hill Start Control, actuate the hand-

74 OPERATION

brake lever **1** or the footbrake lever again.

 Stop symbol disappears.

- Alternatively, ride off in 1st or 2nd gear.

 Hill Start Control is deactivated automatically when driving off.

 The stop symbol disappears after the brake has been released completely.

» Hill Start Control is deactivated.

- More information about Hill Start Control can be found in the "Technology in detail" chapter:
- » Hill Start Control function (➡ 153)

Switch Hill Start Control on and off

- Switching on ignition (➡ 54).
- Go to Settings, Vehicle settings menu.
- Turn Hill Start Control on or off.

Operating the Hill Start Control Pro

—with riding modes Pro^{OE}

Requirement

Vehicle is at a standstill with engine running.

ATTENTION

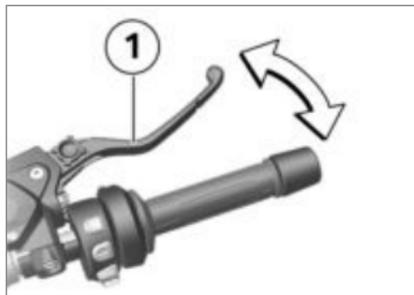
Failure of the drive-off assistant

Risk of accident

- Secure the vehicle through manual braking.

 Hill Start Control Pro is only a comfort system to make starting on hills easier and should therefore not be confused with a parking brake.

 Hill Start Control Pro drive-off assistant should not be used for gradients of more than 40%.



- Apply handbrake lever **1** or footbrake lever firmly and then release again.
- Alternatively, apply the brake for about one second after the vehicle has come to a

standstill, with a gradient of at least 5%.



Green stop symbol is displayed.

- » Hill Start Control Pro is activated.
- To switch off Hill Start Control Pro, activate the handbrake lever **1** or the footbrake lever again.



If Hill Start Control Pro was deactivated using the brake lever, automatic Hill Start Control is deactivated for the next 4 m.



Stop symbol disappears.

- Alternatively, ride off in 1st or 2nd gear.



Hill Start Control Pro is deactivated automatically when driving off.



The stop symbol disappears after the brake has been released completely.

- » Hill Start Control Pro is deactivated.
- More information about Hill Start Control Pro can be found in the chapter "Technology in detail":
- » Hill Start Control function (153)

Adjust Hill Start Control Pro

—with riding modes Pro^{OE}

- Switching on ignition (54).
- Go to **Settings, Vehicle settings** menu.
- Select **HSC Pro**.
- Select **Off** to turn off Hill Start Control Pro.
- » Hill Start Control Pro is deactivated.
- Select **Manual** to turn on manual Hill Start Control Pro.
- » Hill Start Control Pro can be activated by firmly applying the handbrake or footbrake lever.
- Select **Auto** to turn on automatic Hill Start Control Pro.
- » Hill Start Control Pro can be activated by firmly applying the handbrake or footbrake lever.
- » When applying the brake for approximately one second after the vehicle has come to a standstill and on a slope with at least a 5% gradient, Hill Start Control Pro is activated automatically.
- » The selected setting is retained even after the ignition is turned off.

76 OPERATION

SHIFTPOINT LIGHT

–with riding modes Pro^{OE}

Turning the shiftpoint light on and off

- Call up Settings, Vehicle settings menu.
- Switch Shift light on or off.

Setting shifting flash

- Switch on the Shift light function.
- Call up Settings, Vehicle settings, Configuration menu (via Shift light).

» The following settings are available:

–Start RPM

–End RPM

–Brightness

–Frequency. A flashing frequency of 0 Hz corresponds to continuous lighting.

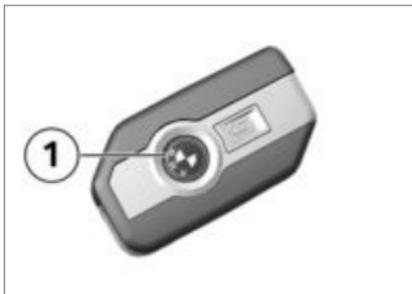
» Changes to the brightness and the flashing frequency are signaled by the shiftpoint light lighting up or flashing.

ANTI-THEFT ALARM SYSTEM (DWA)

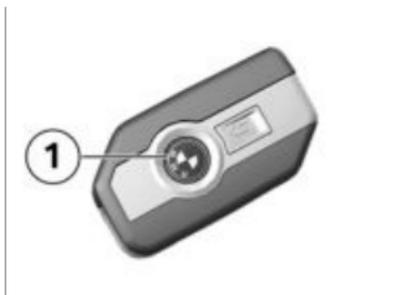
–with anti-theft alarm system (DWA)^{OE}

Activation

- Switching on ignition (➡ 54).
 - Adjust DWA (➡ 78).
 - Switch off ignition.
 - » If DWA is activated, DWA is automatically activated after the ignition is switched off.
 - » Activation takes approximately 30 seconds to complete.
 - » Turn indicators are illuminated twice.
 - » Confirmation tone sounds twice (if programmed).
 - » The anti-theft alarm system is active.
- with Keyless Ride^{OE}



- Switch off ignition.
- Press button **1** on the radio-operated key twice.
 - » Activation takes approximately 30 seconds to complete.
 - » Turn indicators are illuminated twice.
 - » Confirmation tone sounds twice (if programmed).
 - » The anti-theft alarm system is active.



- To deactivate the movement sensor (for example if you are about to transport the motorcycle on a train and the swaying movement of the moving train could trip the alarm), press button **1** on the radio-operated key during the activation phase.
 - » Turn signals are illuminated three times.
 - » Confirmation tone sounds three times (if programmed).
 - » Movement sensor is deactivated.◁

Alarm signal

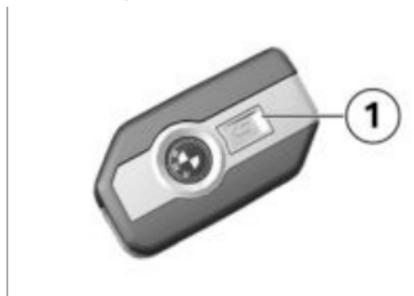
The DWA alarm signal can be triggered by:

- Motion sensor
- Switch-on attempt with an unauthorized ignition key
- Disconnecting the DWA from the vehicle battery (DWA battery takes over the power supply – alarm sound only, hazard warning lights do not flash).

If the DWA battery is discharged all functions remain operational; the only difference is that the alarm cannot be triggered if the system is disconnected from the vehicle battery.

The duration of the alarm signal is approx. 26 seconds. During the alarm, an alarm signal sounds, and the turn indicators flash. The type of alarm sound can be set by an authorized BMW Motorrad retailer.

–with Keyless Ride^{OE}



A triggered alarm signal can be canceled at any time by pressing the button **1** of the radio-operated key without deactivating the DWA.

If an alarm signal has been triggered while the motorcycle was unattended, the rider is notified accordingly by an alarm tone sounding once when the ignition is switched

78 OPERATION

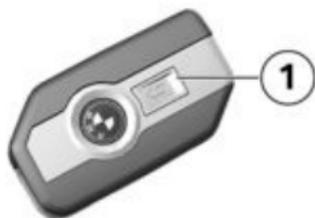
on. The DWA LED then indicates the reason for the alarm signal for one minute.

Light signals on DWA LED:

- 1 flash: motion sensor 1
- 2 flashes: motion sensor 2
- 3 flashes: ignition switched on with unauthorized ignition key
- 4 flashes: anti-theft alarm system disconnected from vehicle battery
- 5 flashes: motion sensor 3

DWA Deactivating

- Switch on ignition.
- with Keyless Ride^{OE}



- Briefly press button 1.
- » Turn indicators light up once.
- » Confirmation tone sounds once (if programmed).
- » DWA is now switched off.<

Adjust DWA

- Switching on ignition (» 54).
- Go to Settings, Vehicle settings, Alarm system menu.

» The following settings are available:

- Adjust Warning signal
- Turn Tilt sensor on and off
- Turn Arming tone on and off
- Turn Arm automatically on and off
- » Adjustment options (» 78)

Adjustment options

Warning signal: Set rising and falling or intermittent alarm tone.

Tilt sensor: Activate the tilt alarm sensor to monitor the tilt of the vehicle. The anti-theft alarm system responds if, for example, if the wheel is stolen or the motorcycle is towed.

 Deactivate the tilt sensor when transporting the vehicle to avoid triggering the DWA.

Arming tone: Confirmation alarm tone after activating/deactivating the DWA in addition to flashing turn indicators.

Arm automatically: Automatic activation of the alarm function when the ignition is turned off.

TIRE PRESSURE CONTROL (RDC)

- with riding modes Pro^{OE}
- with tire pressure monitor (TPM)^{OE}

Switching setpoint pressure warning on or off

- If the minimum tire pressure is reached, a target pressure warning can be displayed.
- Go to Settings, Vehicle settings, RDC menu.
- Switch Target pressure warn. on or off.

HEATED GRIPS

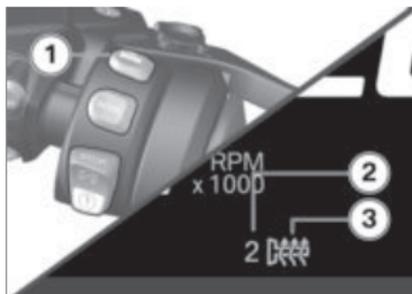
- with heated grips^{OE}

Operating heated grips

 The heated grips option can only be activated when the engine is running.

 The increase in power consumption caused by the heated grips can drain the battery if you are riding at low engine speeds. If the battery is inadequately charged, the heated grips are switched off to ensure starting capability.

- Start the engine ( 121).



- Press the button **1** repeatedly until the desired heating level **2** is shown in front of the heated grip icon **3**. The handlebar grips can be heated at two different levels.

 Medium heater output

 High heater output

- » The 2nd heating level is used for fast heat-up of the grips; then the switch should be switched back to the 1st level.
- » If no further changes are made, the selected heating level is set.
- To switch off the heated grips, press the button **1** repeatedly until the heated grip icon **3** goes out.



- Press driver's seat into front mounts **1** up to stop and then lay on at rear.

TFT DISPLAY

05

GENERAL NOTES	84
PRINCIPLE	85
PURE RIDE VIEW	91
GENERAL SETTINGS	92
BLUETOOTH	94
MY VEHICLE	97
SPORT	100
NAVIGATION	102
MEDIA	104
PHONE	104
DISPLAYING SOFTWARE VERSION	105
DISPLAYING LICENSE INFORMATION	105

 On some mobile devices, e.g. with operating system iOS, the BMW Motorrad Connected App must be called up before using.

Notice concerning current status

After the editorial deadline, there may be updates to the TFT display. For this reason, some aspects of your motorcycle may vary from the descriptions in these Operating Instructions. Updated information at:

bmw-motorrad.com/service

PRINCIPLE

Operating elements



All contents of the display are controlled by the Multi-Controller **1** and the rocker button MENU **2**.

The following functions are possible depending on the context.

Functions of the Multi-Controller

Turn the Multi-Controller up:

- Move cursor up in lists.
- Make settings.
- Increase volume.

Turn the Multi-Controller down:

- Move cursor down in lists.
- Make settings.
- Reduce volume.

Tilt Multi-Controller to the left:

- Activate the function according to the operating feedback.
- Activate function to the left or back.
- After settings, return to menu view.
- In the menu view: move up one hierarchy level.
- In the My Vehicle menu: leaf to the next menu sheet.

Tilt Multi-Controller to the right:

- Activate the function according to the operating feedback.
- Confirm selection.
- Confirm settings.
- Leaf to the next menu step.
- Scroll to right in lists.
- In the My Vehicle menu: leaf to the next menu sheet.

86 TFT DISPLAY

Rocker button MENU functions

 Navigation instructions are displayed as a dialog if the Navigation menu has not been called up. Operation of the MENU rocker button is temporarily restricted.

Briefly press the MENU up:

- In the menu view: move up one hierarchy level.
- In the Pure Ride view: change display for rider info status line.

MENU long press up:

- In the menu view: open Pure Ride view.
- In the Pure Ride view: change the operating focus to the navigator.

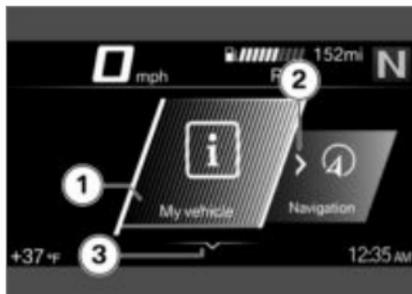
MENU short press down:

- Change a hierarchy level down.
- No function when lowest hierarchy level is reached.

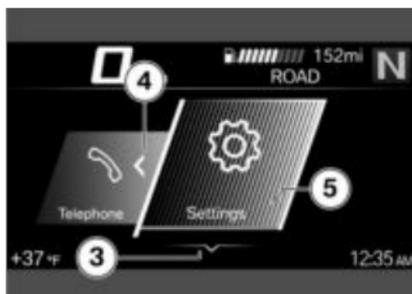
MENU long press down:

- Return to the last menu, after a menu change has been previously carried out by long press of the rocker button MENU at the top.

Operating instructions in the main menu



The operating instructions indicate whether and which interactions are possible.

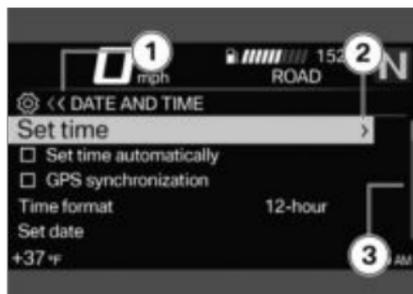


Meaning of the operating instructions:

- Operating instructions 1: the left end has been reached.
- Operating instructions 2: you can scroll to the right.
- Operating instructions 3: you can scroll down.
- Operating instructions 4: you can scroll to the left.
- Operating instructions 5: the right end has been reached.

Operating instructions in submenus

In addition to the operating instructions in the main menu, there are additional operating instructions in submenus.



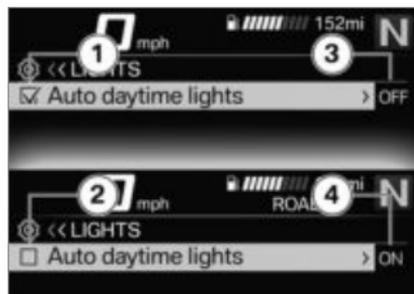
Meaning of the operating instructions:

- Operating instructions **1**: the current display is in a hierarchical menu. One symbol indicates a submenu level. Two symbols indicate two or more submenu levels. The color of the symbol changes depending on whether it is possible to return to the top.
- Operating instructions **2**: another submenu level can be called up.
- Operating instructions **3**: there are more entries than can be displayed.

Show Pure Ride view

- Press and hold the top MENU rocker button.

Switching functions on and off



Some items are preceded by a box. The box indicates whether the function is switched on or off. Action symbols after the menu items illustrate what is switched by briefly tilting the Multi-Controller to the right.

Examples for switching on and off:

- Symbol **1** indicates that the function is switched on.
- Symbol **2** indicates that the function is switched off.
- Symbol **3** indicates that the function can be switched off.
- Symbol **4** indicates that the function can be switched on.

Calling up the last menu used

- In the Pure Ride view: press and hold the bottom of the MENU rocker button.
- » The last used menu is called up. The last marked entry is selected.

Changing operating focus

—with preparation for navigation system^{OE}

When the Navigator is connected, you can switch between the operation of the Navigator and the TFT display.

Changing the operating focus

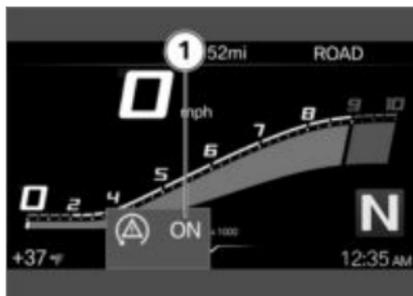
—with preparation for navigation system^{OE}

—with navigation system^{OA}

- Fasten navigation system securely (▮▮▮ 200).
- Show Pure Ride view (▮▮▮ 87).
- Press and hold the top MENU rocker button.
- » Operating focus changes to the Navigator or the TFT display. The active device is marked in the upper left status line. Operating actions affect the active device until the operating focus is changed again.
- » Operating the navigation system (▮▮▮ 202)

System status displays

The system status is displayed in the lower menu area when a function has been switched on or off.



Examples of the meaning of the system statuses:

—System status **1**: ASC/DTC function is switched on.

Changing the display for rider info. status line

Requirement

The vehicle is at a standstill. The Pure Ride view is displayed.

- Switching on ignition (▮▮▮ 54).
- » All of the information necessary for operating the vehicle on public roads is made available from the on-board computer (e.g. TRIP **1**) and the travel on-board computer (e.g. TRIP **2**) in the TFT display. The information can be displayed in the upper status line.

90 TFT DISPLAY

–with tire pressure monitor (TPM)^{OE}

» In addition, information from the tire pressure control (RDC) can be displayed.<

• Selecting content of driver info. status line (▶▶▶ 90).



- Press and hold button **1** to display the Pure Ride view.
- Press button **1** briefly to select the value in the upper status line **2**.

The following values can be displayed:

–Total distance Total

 Current distance 1

 Current distance 2

 Consumption 1 (average)

 Consumption 2 (average)

 Riding time 1

 Riding time 2

 Break 1

 Break 2

 Speed 1 (average)

 Speed 2 (average)

 Tire pressure

 Range

 Fuel tank level

Selecting content of driver info. status line

- Call up menu Settings, Display, Status line content.

- Turn on desired displays.

» It is possible to change between the selected displays in the driver info. status line. If no displays are selected, only the range is shown.

Making settings



- Select desired settings menu and confirm.
 - Turn Multi-Controller **1** down until the desired setting is marked.
 - If an operating instruction is present, tilt Multi-Controller **1** to the right.
 - If no operating instruction is present, tilt Multi-Controller **1** to the left.
- » The setting is saved.

Switching Speed Limit Info on or off

Requirement

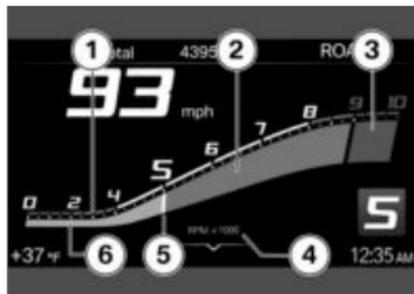
The vehicle is connected to a compatible mobile end device. The BMW Motorrad Connected app is installed on the mobile end device.

- **Speed Limit Info** displays the currently permitted maximum speed insofar as this information is provided by the editor of the maps in the navigation system.

- Call up menu **Settings, Display.**
- **Switch Speed Limit Info** on or off.

PURE RIDE VIEW

Tachometer



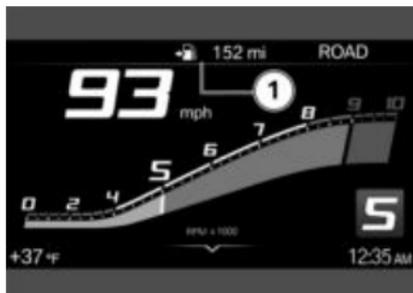
- 1** Scale
- 2** Low engine speed range
- 3** High / red engine speed range
- 4** Needle
- 5** Drag pointer
- 6** Unit for tachometer: 1000 RPM

 The red engine speed range changes depending on the coolant temperature: The colder the engine, the lower the speed at which the red engine speed range begins. The warmer the engine, the higher the speed at which the red engine speed range begins. When the operating temperature has been reached, the red

92 TFT DISPLAY

engine speed range display will no longer change.

Range



The range **1** indicates how far you can ride with the remaining fuel. This distance is calculated on the basis of average consumption and the fuel quantity on board.

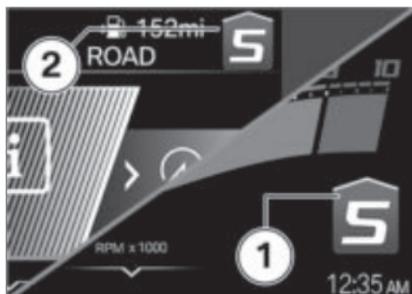
–When the motorcycle is propped on its side stand, the slight angle of inclination means that the sensor cannot register the fuel quantity correctly. For this reason, the range is only recalculated when the side stand is folded in.

–The range is displayed together with a warning once the fuel reserve is reached.

–After refueling, the range is recalculated if the fuel quantity is greater than the fuel reserve.

–The calculated range is only an approximate figure.

Upshift recommendation



Upshift recommendation **1** signals the economically best point in time for upshifting.

GENERAL SETTINGS

Adjusting the volume

- Connect the rider's helmet and the passenger helmet (▣▣▣ 96).
- Increase volume: turn Multi-Controller up.
- Reduce volume: turn Multi-Controller down.
- Mute: turn Multi-Controller all the way down.

Setting the date

- Switching on ignition (▣▣▣ 54).
- Call up menu Settings, System settings, Date and time, Set date.
- Set Day, Month, and Year.
- Confirm setting.

Adjusting the date format

- Call up menu Settings, System settings, Date and time, Date format.
- Select desired setting.
- Confirm setting.

Setting the clock

- Switching on ignition (▣▣▣ 54).
- Call up menu Settings, System settings, Date and time, Set time.
- Set Hour and Minute.

Setting the time format

- Call up menu Settings, System settings, Date and time, Time format.
- Select desired setting.
- Confirm setting.

Switch GPS synchronization on or off

–with preparation for navigation system^{OE}

- Call up menu Settings, System settings, Date and time.
 - Turn GPS synchronization on or off.
- » When the corresponding option is activated in the Navigator, the time is taken from the Navigator.

–with navigation system^{OA}

» Special functions (▣▣▣ 205)◁

Setting the units of measurement

- Call up menu Settings, System settings, Units. The following units of measurement can be set:
 - Distance covered
 - Pressure
 - Temperature
 - Consumption

Setting the language

- Call up menu Settings, System settings, Language. The following languages can be set:
 - German
 - English (UK)
 - English (US)
 - Spanish
 - French
 - Italian
 - Dutch
 - Polish
 - Portuguese
 - Turkish
 - Russian
 - Ukrainian
 - Chinese
 - Japanese
 - Korean
 - Thai

Adjusting brightness

- Call up menu Settings, Display, Brightness.
- Adjust brightness.

94 TFT DISPLAY

» The brightness of the display is dimmed to the set value if ambient brightness falls below a defined value.

Resetting all settings

- All settings in the **Settings** menu can be reset to the factory settings.
- Call up menu **Settings**.
- Select **Reset all** and confirm.

The settings of the following menus are reset:

- Vehicle settings
- System settings
- Connections
- Display
- Information

» Existing Bluetooth connections are not deleted.

BLUETOOTH

Short-range radio technology

Bluetooth is a short-range wireless technology. Bluetooth devices are short-range devices (transmitting with a limited range) on the license-free ISM band (Industrial, Scientific, Medical) between 2.402 GHz and 2.480 GHz. It can be operated anywhere in the world without a license being required.

Although Bluetooth is designed for establishing robust con-

nections over short distances, faults are possible as with any other wireless technology. Connections can be subject to interference, can be briefly interrupted or lost entirely. Especially when several devices are operated in one Bluetooth network, there is no guarantee for smooth operation in every situation.

Possible sources of interference:

- Interference fields due to transmission towers and similar.
- Devices with Bluetooth radio standard that has been incorrectly implemented.
- By nearby Bluetooth-capable devices.

Pairing

Before two Bluetooth devices can establish a connection with each other, they must have identified each other. This process of mutual recognition is known as pairing. When two devices have paired they remember each other, so the pairing process is conducted only once, on initial contact.

 On some mobile devices, e.g. with operating system iOS, the BMW Motorrad

Connected App must be called up before using.

During the pairing process, the TFT display searches for other Bluetooth-compatible devices within its reception range. The conditions that have to be satisfied before the audio system can identify another device are as follows:

- The Bluetooth function of the device must be enabled
- The device must be "visible" to others
- The device must support the A2DP profile
- Other Bluetooth-capable devices must be switched off (e.g. mobile phones and navigation systems).

Please consult the operating instructions for your communication system.

Pairing

- Call up menu **Settings, Connections**.
- » Bluetooth connections can be established, managed, and deleted in the **CONNECTIONS** menu. The following Bluetooth connections are displayed:
 - Mobile device
 - Rider's helmet

-Passenger helm.
The connection status for mobile end devices is displayed.

Connecting a mobile end device

- Pairing (▣▶ 95).
 - Activate the Bluetooth function of the mobile end device (see operating instructions for the mobile end device).
 - Select **Mobile device** and confirm.
 - Select **Pair new mobile device** and confirm.
- Mobile end devices are searched for.



During the pairing, the Bluetooth symbol flashes in the lower status line.

Visible mobile end devices are displayed.

- Select the mobile end device and confirm.
- Observe the instructions for the mobile end device.
- Confirm that the codes match.
- » The connection is established and the connection status is updated.
- » If the connection cannot be established, the troubleshooting chart in the Technical data chapter may provide assistance. (▣▶ 214)
- » Depending on the mobile end device, telephone data

96 TFT DISPLAY

is transferred to the vehicle automatically.

- » Telephone data (▣▣▣▣ 105)
- » If the phone book is not displayed, the troubleshooting chart in the Technical data chapter may provide assistance. (▣▣▣▣ 215)
- » If the Bluetooth connection does not work as expected, the troubleshooting chart in the Technical data chapter may provide assistance. (▣▣▣▣ 215)

Connect the rider's helmet and the passenger helmet

- Pairing (▣▣▣▣ 95).
- Select **Rider's helmet** or **Passenger helm.** and confirm.
- Show the communication system of the helmet.
- Select **Pair new rider's helmet** or **Pair new passeng. helmet** and confirm. Helmets are searched for.

 During the pairing, the Bluetooth symbol flashes in the lower status line.

Visible helmets are displayed.

- Select helmet and confirm.
- » The connection is established and the connection status is updated.
- » If the connection cannot be established, the troubleshoot-

ing chart in the Technical data chapter may provide assistance. (▣▣▣▣ 214)

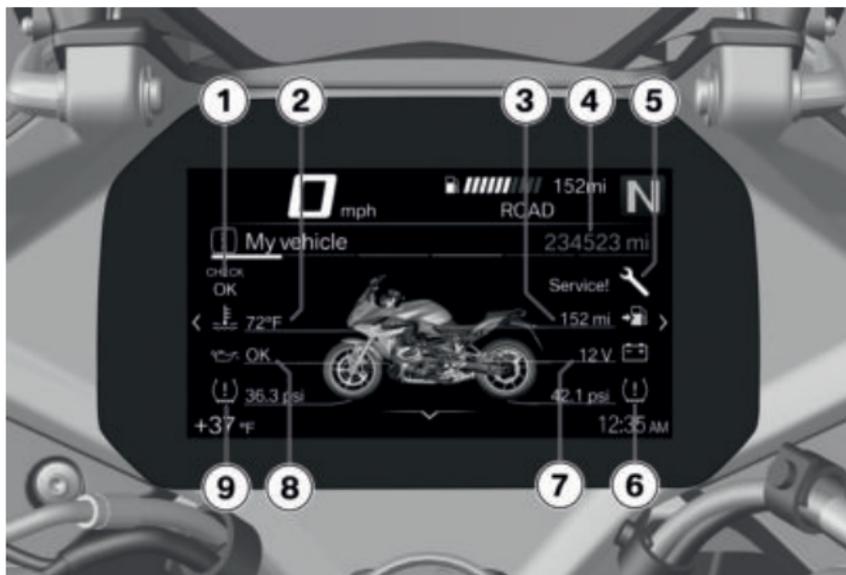
- » If the Bluetooth connection does not work as expected, the troubleshooting chart in the Technical data chapter may provide assistance. (▣▣▣▣ 215)

Deleting connections

- Call up menu **Settings, Connections.**
- Select **Delete connections.**
- To delete an individual connection, select the connection and confirm.
- To delete all connections, select **Delete all connections** and confirm.

MY VEHICLE

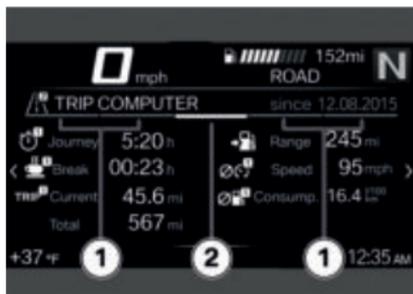
Start screen



- 1 Check Control display
Display (▣▣▣ 25)
- 2 Coolant temperature
(▣▣▣ 37)
- 3 Range (▣▣▣ 92)
- 4 Total distance covered
- 5 Service display (▣▣▣ 49)
- 6 Rear tire pressure (▣▣▣ 39)
- 7 Vehicle voltage (▣▣▣ 184)
- 8 Engine oil level (▣▣▣ 36)
- 9 Front tire pressure
(▣▣▣ 39)

98 TFT DISPLAY

Operating instructions



- Operating instructions **1**: tabs that show how far to the left or right you can scroll.
- Operating instructions **2**: tab that shows the position of the current menu screen.

Scroll through menu windows



- Go to My vehicle menu.
- To scroll to the right, briefly push the Multi-Controller **1** to the right.
- To scroll to the left, briefly push the Multi-Controller **1** to the left.

The following screens are included in the My Vehicle menu:

-MY VEHICLE

- Check Control messages (if present)
 - ONBOARD COMPUTER
 - TRIP COMPUTER
 - with tire pressure monitor (TPM)^{OE}
 - TIRE PRESSURE<
 - SERVICE REQUIREMENTS
 - Further information on the tire pressure and CC messages can be found in the Displays chapter.
-  Check-Control messages are dynamically added to the menu screens in the My vehicle menu as additional tabs.

On-board computer and travel on-board computer

The ONBOARD COMPUTER and TRIP COMPUTER menu windows show the vehicle and journey data, e.g. average values.

Call up on-board computer

- Go to My vehicle menu.
- Scroll to the right until the ONBOARD COMPUTER menu window is displayed.

Reset on-board computer

- Call up on-board computer ( 98).
- Press MENU rocker button down.

- Select **Reset all values** or **Reset individual values** and confirm.

The following values can be reset individually:

- Break
- Journey
- Current (TRIP 1)
- Speed
- Consump.

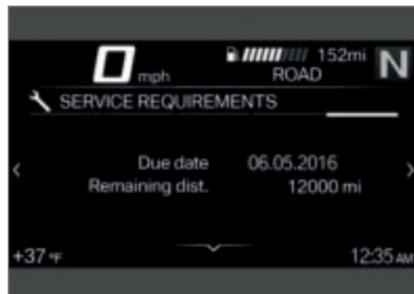
Call up travel on-board computer

- Call up on-board computer (▣▣▣▣ 98).
- Scroll to the right until the **TRIP COMPUTER** menu window is displayed.

Reset travel on-board computer

- Call up travel on-board computer (▣▣▣▣ 99).
 - Press **MENU** rocker button down.
 - Select **Automatic reset** or **Reset all values** and confirm.
- » If **Automatic reset** has been selected, the travel on-board computer is automatically reset if at least 6 hours have passed since the ignition was turned off and the date has changed.

Service requirement



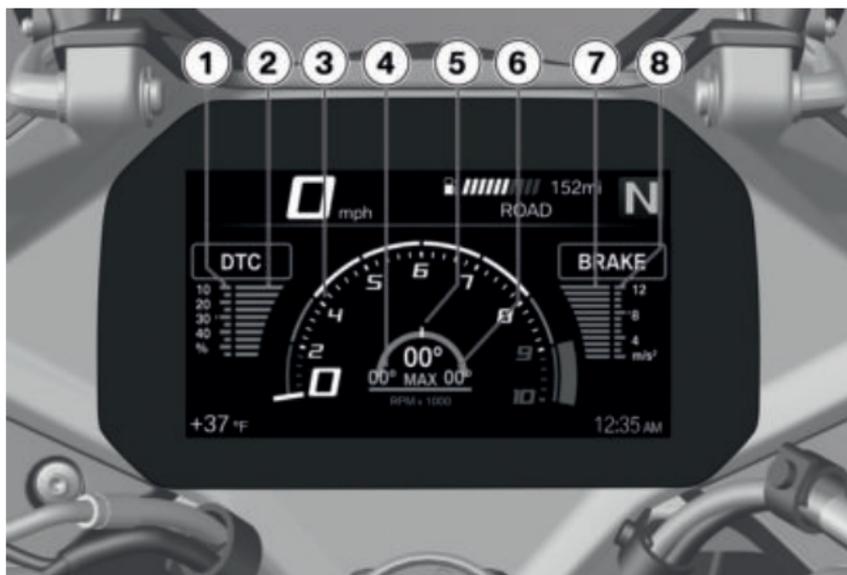
If the time remaining until the next service is less than a month, or if the next service is due within 700 mi (1000 km), a white CC message is displayed.

100 TFT DISPLAY

SPORT

–with riding modes Pro^{OE}

Sport overview



- 1 Maximum DTC torque reduction
- 2 Current DTC torque reduction
- 3 Rotational-speed sensor
- 4 Maximum angle of inclination to left
- 5 Current angle of inclination during cornering for left and right
- 6 Maximum angle of inclination to right
- 7 Current deceleration during braking
- 8 Maximum deceleration

Resetting the maximum values

The maximum values for DTC torque reduction, angle of inclination and deceleration are automatically reset after the ignition is switched off.

102 TFT DISPLAY

NAVIGATION

Warnings



WARNING

Operation of a smartphone while riding or with the engine running

Accident hazard

- Observe the relevant road traffic regulations.
- Do not use while riding (except for applications without operation such as telephony via the hands-free system).



WARNING

Distraction from traffic conditions and loss of control

Risk of accident through the use of integrated information systems and communication devices during the journey

- Operate these systems or devices only if the traffic situation allows.
- If necessary, stop and operate the system or devices at a standstill.

Prerequisite

The vehicle is connected to a compatible mobile end device via Bluetooth.

The BMW Motorrad Connected App is installed on the mobile end device.



On some mobile devices, e.g. with operating system iOS, the BMW Motorrad Connected App must be called up before using.

Enter destination address

- Connecting a mobile end device (►► 95).
- Call up the BMW Motorrad Connected app and start the route guidance.
- Call up menu *Navigation* in the TFT display.
 - » Active route guidance is displayed.
 - » If the active route guidance is not displayed, the troubleshooting chart in the Technical data chapter may provide assistance. (►► 215)

Select destination from most recent destinations

- Call up menu *Navigation*, *Recent destinations*.
- Select destination and confirm.
- Select *Start route guidance*.

Select destination from favorites

- The FAVORITES menu shows all destinations that have been saved as a favorite in the BMW Motorrad Connected app. It is not possible to create new favorites on the TFT display.
- Call up menu Navigation, Favorites.
- Select destination and confirm.
- Select Start guidance.

Entering special destinations

- Special destinations, e.g. landmarks, can be displayed on the map.
- Call up menu Navigation, POIs.

The following locations can be selected:

- At current location
- At destination
- Along the route
- Select in which location you want to search for special destinations.

E.g. the following special destination can be selected:

- Filling station
- Select special destination and confirm.
- Select Start route guidance and confirm.

Specifying route criteria

- Call up menu Navigation, Route criteria.

The following criteria can be selected:

- Route type
 - Avoid
 - Select desired Route type.
 - Turn desired Avoid on or off.
- The number of enabled avoidances is displayed in brackets.

Ending route guidance

- Call up menu Navigation, Active route guidance.
- Select End route guidance and confirm.

Switching spoken instructions on or off

- Connect the rider's helmet and the passenger helmet (👉 96).
- The navigation can be read out by a computer voice. To do this, the Spoken instructions must be turned on.
- Call up menu Navigation, Active route guidance.
- Turn Spoken instructions on or off.

Repeating the last spoken instruction

- Call up menu Navigation, Active route guidance.
- Select Current instruction and confirm.

104 TFT DISPLAY

MEDIA

Prerequisite

The vehicle is connected to a compatible mobile end device and a compatible helmet.

Control music playback



- Go to Media menu.

 BMW Motorrad recommends setting the volume for media and conversations via mobile end devices to the maximum before starting a journey.

- Adjusting the volume (▬► 92).
- Next title: Tilt the Multi-Controller **1** briefly to the right.
- Last title or start of current title: Tilt the Multi-Controller **1** briefly to the left.
- Fast forward: Tilt and hold the Multi-Controller **1** to the right.
- Fast rewind: Tilt and hold the Multi-Controller **1** to the left.
- Call up context menu: Press button **2** down.

 Depending on the mobile end device, the scope of the Connectivity functions may be limited.

- » The following functions can be used in the context menu:
- Playback or Pause.
 - For search and playback, select the category *Now playing*, *All artists*, *All albums*, or *All tracks*.
 - Select Playlists.

In the Audio settings sub-menu you can adjust the following settings:

- Turn Shuffle on or off.
- Repeat: Select *Off*, *One (current track)*, or *All*.

PHONE

Prerequisite

The vehicle is connected to a compatible mobile end device and a compatible helmet.

Make a phone call



- Go to Telephone menu.

- Accept telephone call: Tilt the Multi-Controller **1** to the right.
- Reject telephone call: Tilt the Multi-Controller **1** to the left.
- End telephone call: Tilt the Multi-Controller **1** to the left.

Mute

The microphone in the helmet can be muted during active conversations.

Conversations with multiple users

A second telephone call can be accepted during a conversation. The first conversation will be put on hold. The number of active telephone calls is displayed in the **Telephone** menu. It is possible to switch between two conversations.

Telephone data

Depending on the mobile end device, telephone data is transferred to the vehicle automatically after pairing (▶▶▶▶ 94).

Phone book: List of contacts saved in the mobile end device

Call list: List of telephone calls with the mobile end device

Favorites: List of favorites saved in the mobile end device

DISPLAYING SOFTWARE VERSION

- Call up menu **Settings, Information, Software version.**

DISPLAYING LICENSE INFORMATION

- Call up menu **Settings, Information, Licenses.**

SETTING

06

MIRRORS	108
WINDSHIELD	108
HEADLIGHTS	109
CLUTCH	109
GEARSHIFT LEVER	110
BRAKE	111
FOOTRESTS	113
SPRING PRELOAD	114
DAMPING	115

108 SETTING

MIRRORS

Adjusting mirrors



- Move mirror body to the desired position by turning it.

Adjusting mirror arm



ATTENTION

Collision between mirror arm and other components.
Component damage

- Correctly adjust the mirror arm. Pay attention to the mark on the mirror arm.



- Turn the mirror arm.

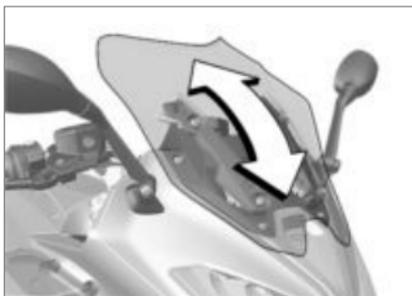


- Line up mark 1.

WINDSHIELD

Adjusting windshield Requirement

The motorcycle is stopped.



WARNING

Adjusting the windshield while driving

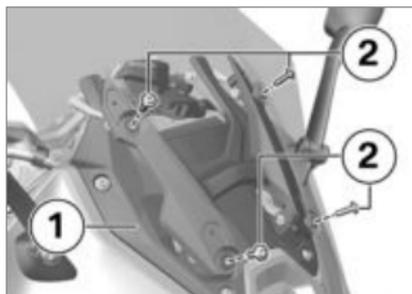
Accident hazard

- Only adjust the windshield when the motorcycle is stationary.
- Fold windshield up or down.

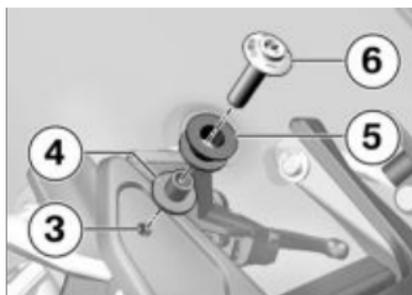
» The windshield is held in the upper or lower end positions by spring force.

Reposition windshield

- The windshield can be fastened on the motorcycle in two different positions.



- Remove all screws **2** and take off windshield **1** to reposition the windshield.



- Position windshield on corresponding hole **3** while watching bushing **4** (inserted **from below**) and rubber grommet **5**.
- Screw in all four screws **6**.

 Windshield in bracket

2 lb/ft (2.4 Nm)

HEADLIGHTS

Headlight range and spring setting

The headlight range generally remains constant due to the adjustment of the spring setting to the loading state. Only with a very heavy payload can adjustment of the spring setting be insufficient. If that is the case, the headlight range must be adapted to the weight.

 If there are doubts as to the correct headlight range, have the adjustment checked by a specialized workshop, preferably by an authorized BMW Motorrad retailer.

CLUTCH

Clutch

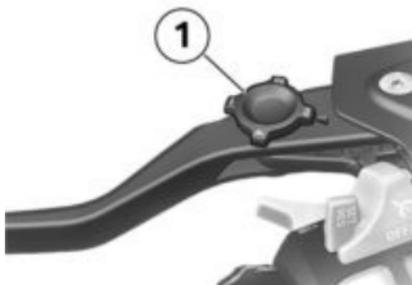
 **WARNING**

Adjusting the clutch lever while driving

Accident hazard

- Adjust the clutch lever when the motorcycle is stationary.

110 SETTING



- Turn the adjustment wheel **1** into the desired position.

 The adjustment wheel can be turned more easily if you press the clutch lever forward when doing so.

» Four settings are available:

- **Position 1:** smallest distance between handlebar grip and clutch lever
- **Position 4:** largest distance between handlebar grip and clutch lever

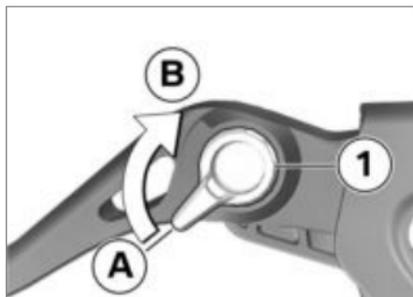
–with Option 719 Billet pack Classic II^{OE}

or

–with Option 719 Billet pack Storm II^{OE}

or

–with Option 719 Billet pack Shadow II^{OE}



- Turn the adjustment lever **1** to the desired position.

» Adjustment options:

- From position **A:** smallest distance between handlebar grip and clutch lever.
- Five steps toward position **B** to increase the distance between the handlebar grip and the clutch lever.◁

GEARSHIFT LEVER

–with Option 719 Billet pack Classic II^{OE}

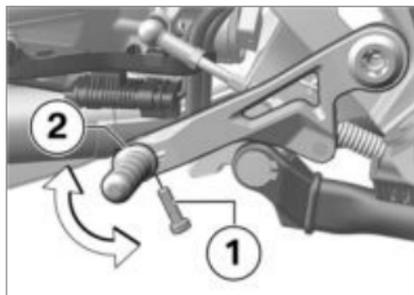
or

–with Option 719 Billet pack Storm II^{OE}

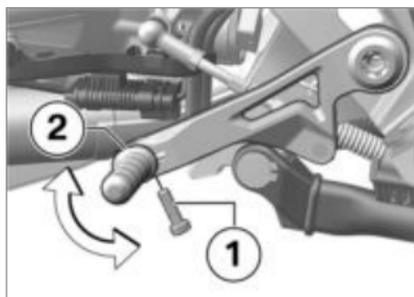
or

–with Option 719 Billet pack Shadow II^{OE}

Adjusting gearshift lever foot plate



- The distance between the feet and the height of the foot plate **2** can be adjusted by turning the foot plate into different positions.
- Remove the screw **1**.



- Clean the thread.
- Turn the foot plate **2** into the desired position.
- Install the **new** screw **1**.



Foot piece to gearshift lever

Thread-locking compound:
micro-encapsulated

7 lb/ft (10 Nm)

BRAKE

Adjusting the brake lever

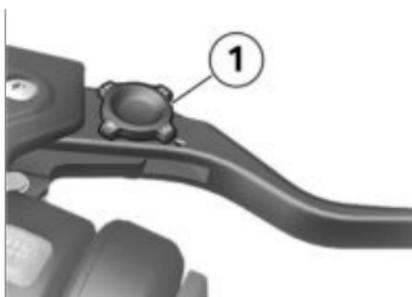


WARNING

Adjusting the brake lever while driving

Risk of accident

- Do not attempt to adjust the brake lever unless the motorcycle is at a standstill.



- Turn the adjustment wheel **1** into the desired position.



The adjustment wheel can be turned more easily if you press the handbrake lever forward when doing so.

- » Four settings are available:
- **Position 1:** smallest distance between handlebar grip and brake lever
 - **Position 4:** largest distance between handlebar grip and brake lever

112 SETTING

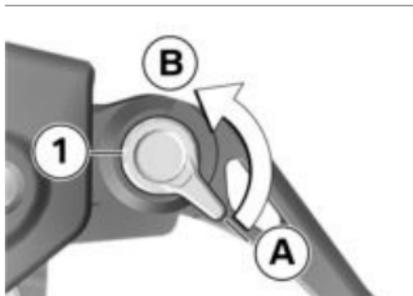
–with Option 719 Billet pack
Classic II^{OE}

or

–with Option 719 Billet pack
Storm II^{OE}

or

–with Option 719 Billet pack
Shadow II^{OE}



• Turn the adjustment lever **1**
to the desired position.

» Adjustment options:

–From position **A**: smallest distance between handlebar grip and handbrake lever.

–Five steps toward position **B** to increase the distance between the handlebar grip and the handbrake lever. <

Adjusting the footbrake lever foot plate

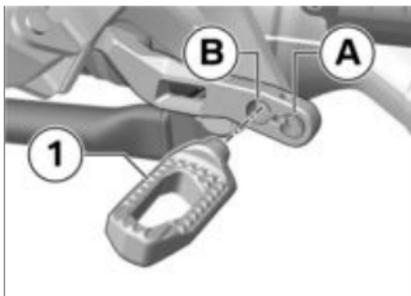
–with Option 719 Billet pack
Classic II^{OE}

or

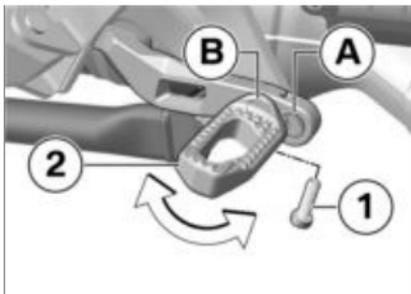
–with Option 719 Billet pack
Storm II^{OE}

or

–with Option 719 Billet pack
Shadow II^{OE}



- The distance to the foot and the height of the foot plate **1** can be adjusted by turning the lever by 180° and installing it in position **A** or **B**.
- Remove the screw **1**.



- Clean the thread.
- Install the foot plate **2** in the desired position **A** or **B**.
- Turn the foot plate **2** into the desired position.
- Install the **new** screw **1**.

 Foot piece on footbrake lever

Thread-locking compound:
micro-encapsulated

7 lb/ft (10 Nm)

FOOTRESTS

–with Option 719 Billet pack
Classic II^{OE}

or

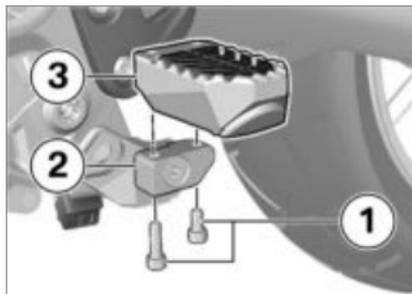
–with Option 719 Billet pack
Storm II^{OE}

or

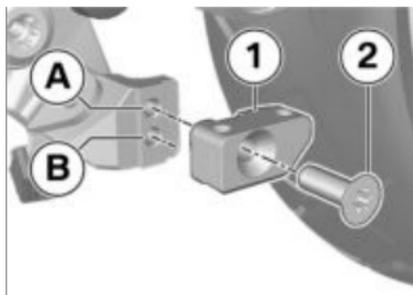
–with Option 719 Billet pack
Shadow II^{OE}

Adjusting footrests

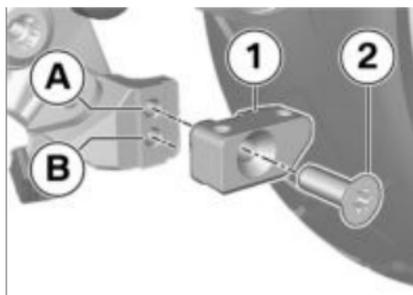
- The footrest is adjusted the same way when moving it right or left.
- The position of the footrest must be set equally on the right and left.



- Remove screws **1**.
- Remove the footrest **3** from the clamping block **2**.



- Remove the screw **2**.
- Remove clamping block **1**.

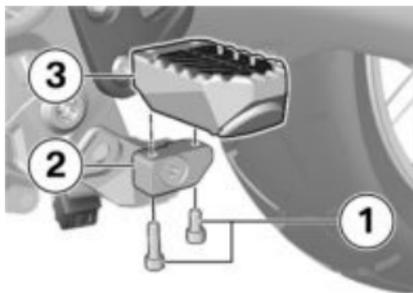


- Install clamping block **1** in the desired position **A** or **B** and tighten screw **2**.

 Clamping block on
footrest hinge

15 lb/ft (20 Nm)

114 SETTING



- Position footrest **3** on clamping block **2**.
- Install screws **1**.

 Footrest on clamping block

7 lb/ft (10 Nm)

- Remove and install the footrest on the other side in the same way.

SPRING PRELOAD

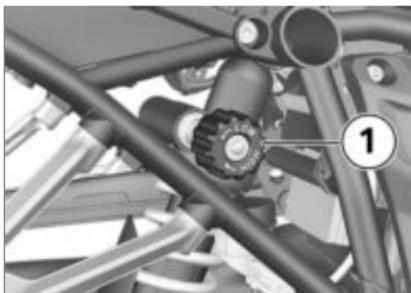
—without Dynamic ESA^{OE}

Setting

It is essential to set the spring preload to suit the load carried by the motorcycle. Increase spring preload when the vehicle is heavily loaded and reduce spring preload accordingly when the vehicle is lightly loaded.

Adjusting spring preload at rear wheel

- Park motorcycle, ensuring that support surface is firm and level.



WARNING

Uncoordinated settings of spring preload and spring strut damping.

Poorer handling.

- Adjust damping characteristic to changed spring preload.

WARNING

Adjusting the spring preload while riding.

Accident hazard

- Adjust the spring preload only when the motorcycle is stationary.
- To decrease spring load, turn adjustment wheel **1** in direction of arrow LOW.
- To increase spring load, turn adjustment wheel **1** in direction of arrow HIGH.

	Basic setting of spring preload, rear
	Turn adjustment wheel as far as possible into LOW direction. (One-up without load)
	Turn adjuster wheel as far as possible in LOW direction, then rotate 15 turns in HIGH direction. (One-up with load)
	Turn adjuster wheel as far as possible in HIGH direction. (Two-up and load)

DAMPING

–without Dynamic ESA^{OE}

Setting

The damping must be adjusted to the road conditions and the spring preload.

–A rough road surface requires softer damping than a smooth road surface.

–An increase in spring preload requires firmer damping, a reduction in spring preload requires softer damping.

Adjusting damping on rear wheel

- Park motorcycle, ensuring that support surface is firm and level.
- Adjust damping from the left side of the vehicle.



- Turn adjuster wheel **1** clockwise to increase damping.
- Turn adjuster wheel **1** counterclockwise to decrease damping.

	Basic setting of rear wheel damping
	Turn adjuster wheel clockwise up to stop, then 6 clicks counterclockwise. (One-up without load)
	Turn adjuster wheel clockwise up to stop, then 4 clicks counterclockwise. (One-up with load)
	Turn adjuster wheel clockwise up to stop. (Two-up with load)

RIDING

07

SAFETY INSTRUCTIONS	118
OBSERVE CHECKLIST	121
BEFORE EVERY JOURNEY	121
AT EVERY THIRD REFUELING STOP	121
STARTING	121
BREAKING IN	124
SHIFTING GEARS	125
BRAKES	127
PARKING YOUR MOTORCYCLE	129
REFUELING	130
SECURING MOTORCYCLE FOR TRANSPORTATION	135

SAFETY INSTRUCTIONS

Rider's Equipment

Do not ride without the correct clothing. Always wear:

- Helmet
- Rider's suit
- Gloves
- Boots

This applies even to short journeys, and to every season of the year. Your authorized BMW Motorrad retailer will be happy to advise you and has the correct clothing for every purpose.

Reduced clearance in inclined position

Motorcycles with lowered running gear have less ground clearance in all positions than motorcycles with standard running gear.



WARNING

When cornering with lowered motorcycles, motorcycle parts can contact the road surface sooner than normal.

Accident hazard

- Carefully test the clearance of the motorcycle in an inclined position and adjust your riding style accordingly.

Test the clearance of your motorcycle at an angle in safe situations. Remember to take the limited ground clearance of your motorcycle into account when driving over curbs and similar obstacles.

The lowering of the motorcycle shortens the spring travel (see the Technical Data chapter). A possible reduction in the accustomed driving comfort may result. Especially when riding in two-up mode, the spring setting should be adjusted accordingly.

Load



WARNING

Reduced riding stability caused by overloading and uneven loading

Accident hazard

- Do not exceed the gross weight limit and observe the loading information.
- Adjust spring setting and damping rate for the gross vehicle weight.
- Ensure that case volumes on left and right are equal.
- Make sure that weight is uniformly distributed between right and left.

- Pack heavy pieces of luggage and cargo as low and as close to the center of the motorcycle as possible.
- Observe the maximum payload and maximum speed as indicated on the label in the case (see also the Accessories chapter).

–with topcase^{OA}

- Observe the maximum payload and maximum speed as indicated on the label in the topcase (see also the Accessories chapter).◁

–with tank bag, small^{OA}

- Observe the maximum load capacity maximum speed of the tank rucksack.

	Storage capacity of tank bag
max 11 lbs (max 5 kg)	
	Speed limit for riding with tank bag
max 112 mph (max 180 km/h)◁	

Speed

If you ride at high speed, always bear in mind that various boundary conditions can adversely affect the handling of your motorcycle:

- Incorrect settings of spring-strut and shock absorber system
- Unevenly distributed load
- Loose clothing
- Insufficient tire inflation pressure
- Tire tread in poor condition
- Etc.

Risk of poisoning

Exhaust gas contains carbon monoxide, which is colorless and odorless but highly toxic.



WARNING

Harmful exhaust gas

Danger of suffocation

- Do not inhale exhaust fumes.
- Do not run the engine in closed rooms.



WARNING

Inhalation of vapors that are harmful to health

Damage to health

- Do not inhale vapors from operating fluids and plastics.
- Only use the vehicle outdoors.

120 RIDING

Burn hazard

CAUTION

Intense heating up of engine and exhaust system while riding

Burn hazard

- After parking the motorcycle, make sure that no persons or objects come into contact with the engine and exhaust system.

Catalytic converter

If misfire causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.

The following must be observed:

- Do not run the fuel tank dry.
- Do not run the engine with the spark-plug cap removed.
- Stop the engine immediately if it misfires.
- Use unleaded fuel only.
- Comply with all specified maintenance intervals.

ATTENTION

Unburned fuel in the catalytic converter

Damage to catalytic converter

- Note the points listed for protection of the catalytic converter.

Danger of overheating

ATTENTION

Engine idling for a lengthy period while at a standstill

Overheating due to insufficient cooling; in extreme cases vehicle fire

- Do not allow the engine to idle unnecessarily.
- After starting, ride off immediately.

Modifications

ATTENTION

Modifications to the motorcycle (e.g. engine control unit, throttle valves, clutch)

Damage to the affected parts, failure of safety-relevant functions, expiration of warranty

- Do not make any modifications.

OBSERVE CHECKLIST

- Use the following checklist to check your motorcycle at regular intervals.

BEFORE EVERY JOURNEY

- Check operation of the brake system.
- Check operation of the lighting and signal system.
- Check clutch function (▣▣▣ 168).
- Checking tire tread depth (▣▣▣ 170).
- Checking tire pressure (▣▣▣ 169).
- Check secure hold of cases and luggage.

AT EVERY THIRD REFUELING STOP

- Checking engine oil level (▣▣▣ 162).
- Check front brake pad thickness (▣▣▣ 164).
- Checking rear brake pad thickness (▣▣▣ 165).
- Checking the front brake fluid level (▣▣▣ 166).
- Check the rear brake fluid level (▣▣▣ 167).
- Checking coolant level (▣▣▣ 168).

STARTING

Start the engine

- Switch on the ignition.
 - » Pre-Ride-Check is carried out. (▣▣▣ 122)
 - » ABS self-diagnosis is performed. (▣▣▣ 122)
 - » ASC/DTC self-diagnosis is performed. (▣▣▣ 124)
- Engage neutral, or pull back clutch lever if a gear is engaged.

 You cannot start the motorcycle with the side stand extended and a gear engaged. The engine will switch itself off if it is started with the transmission in neutral and then a gear is engaged before retracting the side stand.

- In the case of cold start or under cold temperatures: Pull back clutch lever.



- Press the starter button **1**.

122 RIDING



The starting procedure is automatically canceled if the battery voltage is too low. Recharge the battery before you attempt to start the engine again, or use jump-starting. More detailed information can be found in the Maintenance chapter under Jump-starting.

» Engine starts.

» If the engine fails to start, the troubleshooting table in the Technical Data chapter may provide assistance (▶▶▶ 214)

Pre-Ride-Check

After the ignition is turned on, the instrument cluster performs a test of the instrument dials and the indicator and warning lights – this is the "Pre-Ride-Check". Starting the engine before the test routine is completed will cancel the remainder of the routine.

Phase 1

All indicator and warning lights are switched on.

After a longer standstill of the vehicle, an animation is displayed during the system start.

Phase 2

The general warning light switches from red to yellow.

Phase 3

All switched on indicator and warning lights are switched off one after the other in reverse order.

If one of the indicator and warning lights does not switch on:



WARNING

Defective warning lights

Lack of display of malfunctions

- Check the display of all indicator and warning lights.
- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS self-diagnosis

The self-diagnosis routine checks whether the BMW Motorrad Integral ABS is ready for operation. The self-diagnosis routine runs automatically when you switch on the ignition.

Phase 1

- » Check on system components monitored by the diagnostic system while motorcycle is parked.



flashes.

Phase 2

» Check wheel sensors while starting off.



flashes.

ABS self-diagnosis completed

» The ABS indicator and warning light goes out.

- Check the display of all indicator and warning lights.



ABS self-diagnosis routine not completed

ABS is not available, as the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel speed sensors: 3 mph (5 km/h))

If an ABS error is displayed after the ABS self-diagnosis is completed:

- It remains possible to continue riding. Please be aware that neither the ABS nor the integral function are available.
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

ABS self-diagnosis

The self-diagnosis routine checks whether the BMW Motorcycle Integral ABS is ready for operation. The self-diagnosis routine runs automatically when you switch on the ignition. To check the wheel speed sensors, the motorcycle must be driven a few meters at a minimum speed of 3 mph (5 km/h).

Phase 1

» Check on system components monitored by the diagnostic system while motorcycle is parked.



flashes.

Phase 2

» Check wheel sensors while starting off.



flashes.

ABS self-diagnosis completed

» The ABS indicator and warning lamp goes out.

- Check the display of all indicator and warning lights. An ABS error is indicated following completion of the ABS self-diagnosis routine.
- It remains possible to continue riding. Please be aware

124 RIDING

that neither the ABS nor the integral function are available.

- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

ASC/DTC self-diagnosis

The self-diagnosis routine is determining whether BMW Motorrad ASC/DTC is ready for operation. The self-diagnosis routine runs automatically when you switch on the ignition.

Phase 1

- » Check on system components monitored by the diagnostic system while motorcycle is parked.



ASC indicator and warning light flashes slowly.

Phase 2

- » Checking the diagnosable system components while the motorcycle is moving.



ASC indicator and warning light flashes slowly.

ASC/DTC self-diagnosis completed

- » The ASC DTC indicator and warning light goes out.

- Check the display of all indicator and warning lights.



ASC/DTC self-diagnosis routine not completed

ASC/DTC is not available, as the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel speed sensors: 3 mph (5 km/h))

If an ASC/DTC error is displayed after the ASC/DTC self-diagnosis is completed:

- It remains possible to continue riding. It must be noted that the ASC/DTC function is not available.
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

BREAKING IN

Engine

- In the period preceding the initial inspection attempt to change rpm and engine load as frequently as possible, avoiding extended periods at constant rpm.
- Choose curvy, slightly hilly sections of road if possible.

- Observe the engine run-in speeds.

	Engine break-in speeds
	<5000 min ⁻¹ (Mileage 0...621 miles (0...1000 km))
	No full throttle (Mileage 0...621 miles (0...1000 km))

- Observe mileage, after which the running-in check should be performed.

	Mileage until running-in check
	311...746 miles (500...1200 km)

Brake pads

New brake pads must be run in before they achieve their optimum friction force. This initial reduction in braking efficiency can be compensated for by exerting greater pressure on the brake levers.



WARNING

New brake pads

Extension of the braking distance, accident hazard

- Brake early.

Tires

New tires have a smooth surface. This must be roughened by riding in a restrained manner at various lean angles until the tires are run in. This running in procedure is essential if the tires are to achieve maximum grip.



WARNING

Loss of adhesion of new tires on wet roads and at extreme angles

Accident hazard

- Always think well ahead and avoid extreme angles.

SHIFTING GEARS

Pro shift assistant

–with Gearshift Assistant Pro^{OE}



Due to safety reasons, the cruise control is automatically disabled when downshifting with the Gear Shift Assistant Pro.



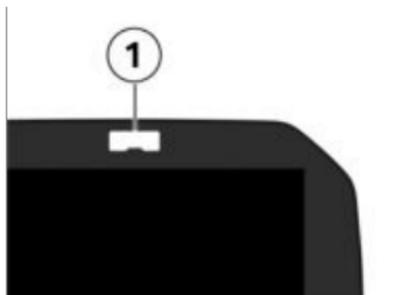
- The gears are shifted into as usual with foot force on the shift lever.
 - » The Gearshift Assistant provides assistance for upshifts and downshifts, without the rider having to actuate the clutch or throttle grip.
 - This is not an automatic-shift system.
 - The rider is the most important part of the system and decides when to shift gears.
 - » The sensor **1** on the gearshift shaft detects the gearshift request and triggers the shift assistance.
 - » When riding at a steady speed in a low gear at high engine rpm, an attempt to shift gear without pulling the clutch can cause a severe load-change reaction. BMW Motorrad recommends disengaging the clutch for shifts in these circumstances. Use of the Pro Gear Shift Assistant should be avoided

at engine speeds where the engine speed limiter becomes active.

- » Shift assistance is not available in the following situations:
 - With clutch actuated.
 - Shift lever not in its initial position
 - When upshifting with closed throttle valve (coasting overrun) or when decelerating.
 - When downshifting with open throttle valve or when accelerating.
- To be able to make another gear shift using the Pro Gear Shift Assistant, the gearshift lever must be fully released after the first gear change.
 - » Further information on the Gearshift Assistant Pro can be found in the Technology in detail chapter:
 - » Shift assistant Pro (III► 151)

Shiftpoint light

- with riding modes Pro^{OE}



The shiftpoint light **1** signals to the rider that the engine speed is approaching the RPM at which the rider needs to shift to the next highest gear.

- Shiftpoint light flashes at the preset frequency: The shifting speed will soon be reached
- Shiftpoint light goes out: Shifting speed reached

The speed thresholds and the behavior of the shiftpoint light can be adjusted in the *Settings, Vehicle settings* menu, see also the *Operation (▶▶ 76)* chapter.

BRAKES

How do you achieve the shortest stopping distances?

The dynamic load distribution between the front and rear wheel changes during braking. The heavier you brake, the greater the weight transfer to the front wheel. Increases in the load on an individual wheel

are accompanied by a rise in the effective braking force that the wheel can provide.

To achieve the shortest possible braking distance, the front brake must be applied quickly and with progressively greater levels of force. This procedure provides ideal exploitation of the extra weight transfer to the front wheel. The clutch should also be disengaged at the same time. The frequently-practiced procedure for "panic braking", in which maximum braking force is applied as rapidly as possible, produces deceleration rates that rise more quickly than the dynamic weight transfer occurs. As a result, a complete transfer of braking force to road surface is not possible.

Locking up of the front wheel is prevented by BMW Motorrad Integral ABS.

Descending mountain passes



WARNING

Braking should be done predominantly using the rear wheel brake when riding on downhill routes

Loss of braking effect, destruction of the brakes due to overheating

- Apply the front and rear wheel brake and use the engine brake.

Wet, soiled brakes

Moisture and dirt on the brake rotors and the brake pads result in a decrease in the braking action.

Delayed or poorer braking action must be expected in the following situations:

- When driving in the rain and through puddles.
- After washing the vehicle.
- When driving on roads spread with salt.
- After working on the brakes due to oil or grease residues.
- When riding on dirty roads.



WARNING

Poorer braking action due to moisture and dirt

Accident hazard

- Brake until brakes are dry or clean; clean if necessary.
- Brake early until the full braking action is available again.

ABS Pro

–with riding modes Pro^{OE}

Physical riding limits



WARNING

Braking in curves

Danger of falling despite ABS Pro

- The rider is always responsible for adapting his/her driving style.
- Do not reduce the system's extra safety margin with careless riding or unnecessary risks.

ABS Pro and the supporting function of the Dynamic Brake Control are available in all riding modes.

Falling cannot be excluded

Although ABS Pro and Dynamic Brake Control represent valuable support and an enormous safety advantage for the rider when braking in an inclined position, they by no means redefine the physical riding limits. It is still possible to exceed those limits through misjudgments or riding errors. In extreme cases this may result in a fall.

Use on public roads

ABS Pro and Dynamic Brake Control help make riding your motorcycle on public roads even safer. When braking due to unexpected hazards in curves, ABS Pro prevents blocking and slipping of the wheels within the scope of the physical riding limits. In the event of emergency braking, Dynamic Brake Control enhances the braking effect and intervenes if the throttle grip is accidentally actuated during braking.

 ABS Pro was not developed to increase the individual braking performance in the inclined position.

PARKING YOUR MOTORCYCLE**Side stand**

- Switch off engine.

**ATTENTION****Poor ground conditions in area of stand**

Component damage caused by tipping over

- Always check that the ground under the stand is level and firm.

**ATTENTION****Loading of the side stand with additional weight**

Component damage caused by tipping over

- Do not sit on the motorcycle when it is parked on the side stands.
- Fold out side stand and park motorcycle.
- Turn the handlebars to left.
- On slopes point the motorcycle uphill and engage 1st gear.

130 RIDING

Center stand

–with center stand^{OE}

- Switch off engine.



ATTENTION

Poor ground conditions in area of stand

Component damage cause by tipping over

- Always check that the ground under the stand is level and firm.



ATTENTION

Folding in the center stand in case of strong movements

Component damage cause by tipping over

- Do not sit on the vehicle while it is resting on the center stand.
- Fold out center stand and jack up motorcycle.
- On slopes point the motorcycle uphill and engage 1st gear.

REFUELING

Fuel specifications

Requirement

For optimal fuel economy, the gasoline should be sulfur-free or very low in sulfur content.



ATTENTION

Refueling with leaded fuel

Damage to catalytic converter

- Do not refuel with leaded gasoline or gasoline with metallic additives, e.g. manganese or iron.



ATTENTION

Use of Ethanol E85 as fuel

Damage to the engine and fuel supply

- Do not refuel with E85, i.e. fuel with an ethanol content of 85 %, or with Flex Fuel.
- Observe the maximum ethanol content of the fuel.



Recommended fuel quality

Super unleaded (max 15% ethanol, E0/E5/E10/E15)
89 AKI (95 ROZ/RON)
90 AKI



Alternative fuel quality

Regular unleaded (restrictions with regard to power and fuel consumption.) (max 15% ethanol, E0/E5/E10/E15)

87 AKI (91 ROZ/RON)

87 AKI

- » After refueling with lower quality fuels, there may occasionally be a knocking noise.

Refueling procedure



WARNING

Fuel is highly flammable

Fire and explosion hazard

- Do not smoke. Never bring a naked flame near the fuel tank.



WARNING

Escaping of fuel due to expansion under exposure to heat with overfilled fuel tank

Accident hazard

- Do not overfill the fuel tank.

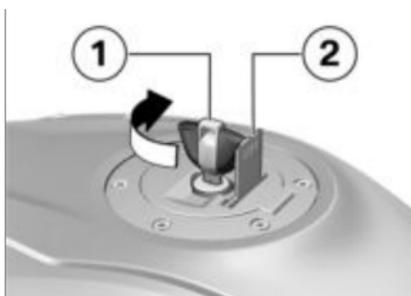


ATTENTION

Contact of fuel and plastic surfaces

Damage to surfaces (become unattractive or cloudy)

- Immediately clean plastic surfaces after contact with fuel.
- Make sure ground is level and firm and place motorcycle on side stand.



- Open the protective cap **2**.
- Unlock the fuel tank cap in a clockwise direction using the ignition key **1** and fold it up.

132 RIDING



- Refuel with a fuel meeting the specifications above, continuing until fuel is no higher than lower edge of filler neck.

 If refueling is carried out after running on fuel reserve, the resulting filling capacity must be greater than the fuel reserve so that the new fill level is detected and the fuel reserve indicator light is switched off.

 The "usable fuel quantity" specified in the technical data is the fuel quantity, which can be refueled if the fuel tank was completely emptied, i.e., if the engine dies off due to lack of fuel.



Fuel level

Approx. 4.8 gal (Approx. 18 l)



Fuel reserve

Approx. 1.1 gal (Approx. 4 l)

- Press fuel tank cap down firmly to close.
- Remove vehicle key and close protective cap.

Refueling procedure

—with Keyless Ride^{OE}

Requirement

Steering lock is unlocked.



WARNING

Fuel is highly flammable

Fire and explosion hazard

- Do not smoke. Never bring a naked flame near the fuel tank.



WARNING

Escaping of fuel due to expansion under exposure to heat with overfilled fuel tank

Accident hazard

- Do not overfill the fuel tank.

**ATTENTION****Contact of fuel and plastic surfaces**

Damage to surfaces (become unattractive or cloudy)

- Immediately clean plastic surfaces after contact with fuel.

- Make sure ground is level and firm and place motorcycle on side stand.
- Switching off the ignition (→ 55).



After the ignition is switched off, the fuel filler cap can be opened within the specified run-on time even without the radio-operated key being within the reception area.



After-running period for opening the fuel filler cap

2 min

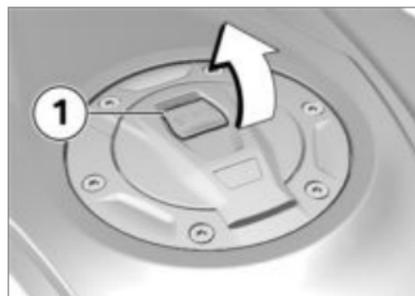
- » There are **2 ways** to open the fuel filler cap:
 - Within the after-running period.
 - After the after-running period expires.

Version 1

–with Keyless Ride^{OE}

Requirement

Within the run-on time:



- Slowly pull the lug **1** of the fuel filler cap upward.
 - » Fuel filler cap unlocked.
- Open fuel filler cap completely.

Version 2

–with Keyless Ride^{OE}

Requirement

After run-on time expires:

- Bring radio-operated key into reception range.
- Slowly pull up tab **1**.
 - » The indicator light for the radio-operated key flashes as long as the radio-operated key is being searched for.
- Slowly pull the lug **1** of the gas cap upward again.
 - » Fuel filler cap unlocked.
- Open fuel filler cap completely.

134 RIDING



- Refuel with a fuel meeting the specifications above, continuing until fuel is no higher than lower edge of filler neck.

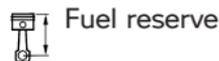
 If refueling is carried out after running on fuel reserve, the resulting filling capacity must be greater than the fuel reserve so that the new fill level is detected and the fuel reserve indicator light is switched off.

 The "usable fuel quantity" specified in the technical data is the fuel quantity, which can be refueled if the fuel tank was completely emptied, i.e., if the engine dies off due to lack of fuel.



Fuel level

Approx. 4.8 gal (Approx. 18 l)



Fuel reserve

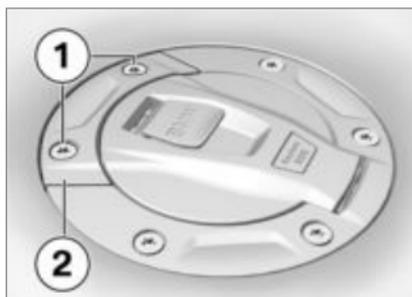
Approx. 1.1 gal (Approx. 4 l)

- Press fuel filler cap of fuel tank down firmly.
 - » Fuel filler cap audibly engages.
 - » Fuel filler cap automatically locks after run-on time expires.
 - » The engaged fuel filler cap locks immediately when the steering lock is locked or during starting.

Open fuel filler cap emergency release —with Keyless Ride^{OE}

The fuel filler cap cannot be opened.

- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.



- Remove screws **1**.

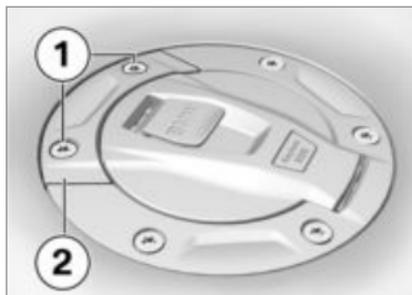
- Remove emergency release **2**.
» Fuel filler cap unlocked.
- Open fuel filler cap completely.
- Refueling procedure (▶▶▶ 132).
- Close fuel filler cap emergency release (▶▶▶ 135).

Close fuel filler cap emergency release

–with Keyless Ride^{OE}

Requirement

Fuel filler cap is closed.



- Position the emergency release **2**.
- Install screws **1**.

SECURING MOTORCYCLE FOR TRANSPORTATION

- Protect all component surfaces against which straps are routed against scratching. For example, use adhesive tape or soft cloths.



ATTENTION

Motorcycle tips to the side when raising

Component damage cause by tipping over

- Secure the motorcycle against tipping to the side, preferably with the assistance of a second person.
- Push the motorcycle onto the transportation flat and hold it in position: do not place it on the side stand or center stand.

136 RIDING



- Tension all straps evenly so that the vehicle is securely fastened.



ATTENTION

Pinching of components

Component damage

- Do not pinch components, e.g. brake lines or wiring harnesses.
- Pass the straps on the left and right through the fork bridge and strap the motorcycle down.



- Fasten the rear tensioning straps on both sides of the holder for the passenger footrests and tighten.

TECHNOLOGY IN DETAIL

08

GENERAL NOTES	140
ANTI-LOCK BRAKING SYSTEM (ABS)	140
TRACTION CONTROL (ASC/DTC)	143
DYNAMIC ENGINE BRAKE CONTROL (MSR)	145
DYNAMIC ESA	146
RIDING MODE	147
DYNAMIC BRAKE CONTROL	149
TIRE PRESSURE CONTROL (RDC)	150
GEAR SHIFT ASSISTANT	151
HILL START CONTROL	153
SHIFTCAM	154

GENERAL NOTES

More information on the topic of technology is available at: bmw-motorrad.com/technology

ANTI-LOCK BRAKING SYSTEM (ABS)

Partially integral brake

Your motorcycle is equipped with a partially integral brake configuration. Both front and rear brakes are applied simultaneously when you pull the handbrake lever. The foot-brake lever acts only on the rear brake.

BMW Motorrad Integral ABS adapts the brake force distribution between the front and rear brakes during braking by means of ABS modulation to suit the load carried by the motorcycle in order to achieve the shortest possible braking distance.



ATTENTION

Attempt at a burn-out despite integral function

Damage to rear-wheel brake and clutch

- Do not perform burn-out.

How does the ABS work?

The maximum braking force that can be transferred to the road surface is partially dependent on the friction coefficient of the road surface. Gravel, ice, snow and wet roads offer a considerably lower friction coefficient than a dry, clean asphalt surface. The poorer the friction coefficient of the road surface is, the longer the braking distance will be.

If the maximum transferable braking force is exceeded when the rider increases the brake pressure, the wheels begin to lock and driving stability is lost, and a fall can result. Before this situation occurs, ABS is activated and the brake pressure is adjusted to the maximum transferable braking force. This enables the wheels to continue to turn and maintains driving stability regardless of the road surface condition.

What happens when rough roads are encountered?

Bumpy or rough roads can briefly lead to a loss of contact between the tires and the road surface, until the transferable braking force is reduced to zero. If braking is carried out in

this situation, ABS must reduce the brake pressure to ensure driving stability when restoring contact to the road. At this point in time, the ABS must assume extremely low friction coefficients (gravel, ice, snow) so that the running wheels turn in every imaginable case and the driving stability is ensured. After detecting the actual conditions, the system adjusts the optimum brake pressure.

In what ways is the ABS noticeable to the rider?

If the ABS system has to reduce the braking force due to the conditions described above, then vibrations can be felt through the handlebar brake lever.

If the handbrake lever is pulled, then braking pressure is built up at the rear wheel with the integral function. If the footbrake lever is first actuated after this, the brake pressure already built up can be felt earlier than the counter-pressure, than when the footbrake lever is actuated before or together with the handbrake lever.

Lifting off rear wheel

However, during extremely heavy and rapid decelerations it is possible that the ABS cannot prevent the rear wheel from lifting off the ground. In these cases, the motorcycle can also flip end over end.



WARNING

Lifting off of the rear wheel due to heavy braking

Accident hazard

- When braking heavily, bear in mind that the ABS control cannot always be relied on to prevent the rear wheel from lifting off the ground.

What are the design characteristics of the ABS?

The ABS ensures driving stability on any surface within the limits of driving physics. The system is not optimized for special requirements resulting under extreme weather conditions on the racetrack. Handling should be adopted to driving skills and road conditions.

142 TECHNOLOGY IN DETAIL

Special situations

To detect the tendency of the wheels to lock up, the speeds of the front and rear wheel are compared. If the system registers implausible data for an extended period of time it will deactivate the ABS as safety precaution and a display will alert you to an ABS error. A self-diagnosis routine must be completed before the error will be displayed.

Apart from problems with the BMW Motorrad ABS, unusual riding conditions can also cause a fault message to be generated:

- Warm-up on the center or auxiliary stand at idle or with gear engaged.
- Rear wheel locked-up for a longer period of time by engine brake, e.g. when riding downhill on slippery surfaces.

Should a fault code occur due to an unusual driving condition, the ABS function can be reactivated by switching the ignition off and then on again.

How important is regular maintenance?



WARNING

Failure to have maintenance performed on the brake system regularly.

Accident hazard

- To ensure that the ABS is in a properly maintained condition, it is vital that the specified service intervals be observed.

Reserves for safety

But remember: the potentially shorter braking distances which ABS permits must not be used as an excuse for careless riding. ABS is primarily a means of ensuring a safety margin in genuine emergencies.



WARNING

Braking in curves

Risk of accident despite ABS

- The rider is always responsible for adapting his/her driving style.
- Do not reduce the additional safety function with careless riding or unnecessary risks.

Further development of ABS to ABS Pro

—with riding modes Pro^{OE}

In the past, the BMW Motorrad ABS system provided for a very high level of safety while braking during straight-ahead riding. Now ABS Pro also offers increased safety even when braking in curves. ABS Pro prevents locking-up of the wheels even in case of rapid brake actuation. ABS Pro reduces abrupt changes in steering forces, especially during panic braking, and therefore decreases the risk of unwanted wheelies occurring.

ABS control

From a technical standpoint, ABS Pro adjusts the ABS control to the angle of inclination of the motorcycle in dependence on the respective riding situation. Signals for the roll and yaw rate and the lateral acceleration are used to determine the inclination of the motorcycle.

With an increasing inclination, the braking pressure gradient is increasingly limited at the start of braking. This results in a slower pressure buildup. In addition, the pressure modu-

lation in the range of the ABS control is more uniform.

Advantages for the rider

The advantages of ABS Pro for the rider are sensitive response and high braking and riding stability with the best possible deceleration, even in curves.

TRACTION CONTROL (ASC/DTC)

How does traction control work?

Traction Control is available in two versions

- Without** taking the angle into account: Automatic Stability Control ASC
- ASC is a rudimentary function intended to prevent falls.
- With** taking the angle into account: Dynamic Traction Control DTC
- The additional inclined position and acceleration information enables the DTC to make more precise and comfortable adjustments.

The traction control compares the speeds at the perimeters of the front and rear wheel. The slip, and with it the stability reserves at the rear wheel, are determined from the speed difference. The engine management system adapts the engine

torque when the slip limit is exceeded.

BMW Motorrad ASC/DTC is designed as an assistance system for the rider and for riding on public roads. The extent to which the rider affects ASC/DTC control can be considerable (weight shifts when cornering, loose luggage on the motorcycle), especially when approaching the limits imposed by the laws of physics.

The **Enduro** riding mode should be activated for off-road riding. In this mode, the controlling intervention by the ASC/DTC is carried out later, enabling controlled drifting. The system is not optimized for the special conditions encountered under extreme weather during off-road and race-track use. BMW Motorrad ASC/DTC can be switched off under these conditions.



WARNING

Risky riding style

Accident hazard despite ASC/DTC

- The rider is always responsible for adapting his/her driving style.
- Do not reduce the system's extra safety margin with careless riding or unnecessary risks.

Special situations

As lean angles increase, acceleration capability is also progressively restricted by the laws of physics. This can result in reduced acceleration when coming out of very tight curves.

To detect spinning or slipping away of the rear wheel, among other things the RPMs of the front and rear wheel are compared, and the angle with DTC compared to ASC is taken into account.

—with riding modes Pro^{OE}

If the values for the lean angle are detected to be implausible for a long period, a replacement value is used for the angle, or the DTC function is switched off. In these cases, a DTC error is displayed. A self-

diagnosis must be completed before the fault memory entry will be displayed.

Under the following unusual riding conditions, BMW Motorrad Traction Control may be deactivated automatically.

Unusual riding conditions:

- Riding on the rear wheel (wheelie) for a longer period.
- Rear wheel spinning in place with front wheel brake engaged (burn out).
- Warming up the engine on an auxiliary stand in neutral or with gear engaged.



Minimum speed for DTC activation

min 3 mph (min 5 km/h)

If the front wheel loses contact with the ground under extreme acceleration, the ASC or DTC function reduces the engine torque in the RAIN and ROAD riding modes until the front wheel makes contact with the ground again.

In the DTC settings DYNAMIC and DYNAMIC PRO, the front wheel lift-off detection permits brief wheelies.

In the RAIN, ROAD and DYNAMIC riding modes, the

DTC settings corresponds to the riding mode.

DTC can be set differently in the DYNAMIC PRO riding mode (➡ 69).

BMW Motorrad recommends that you respond to the front wheel lifting off by letting off on the throttle grip somewhat to return to a stable riding state as quickly as possible.

On a slippery surface, the throttle grip should never be suddenly throttled back completely unless the clutch is disengaged at the same time. The engine braking torque can cause the rear wheel to slip, resulting in an unstable riding state. This case cannot be controlled by BMW Motorrad DTC. Dynamic engine brake control prevents this unstable riding state.

DYNAMIC ENGINE BRAKE CONTROL (MSR)

–with riding modes Pro^{OE}

How does dynamic engine brake control work?

The purpose of the dynamic engine brake control is to safely prevent unstable riding conditions that are related to excess drag torque at the rear wheel. Depending on the road

146 TECHNOLOGY IN DETAIL

condition and riding dynamics, excess drag torque can make the drive slip at the rear wheel increase severely and impede riding stability. The dynamic engine brake control limits slip at the rear wheel to a safe, setpoint slip that is dependent on the mode and angle.

Causes of excess slip at the rear wheel:

- Riding in coasting overrun on a road with low coefficient of friction (e.g. wet leaves).
- Hopping when shifting gears down.
- Hard brake onset in sporty riding style.

Like the DTC traction control, the dynamic engine brake control compares the wheel circumferential velocities of the front and rear wheel. With the aid of more information on the angle, the dynamic engine brake control can determine the slip or the stability reserve at the rear wheel.

If the slip exceeds the respective limit value, the engine torque is increased by slightly opening the throttle valves. The slip is reduced, and the vehicle is stabilized.

Effect of the dynamic engine brake control

- In the RAIN and ROAD riding modes: maximum stability.
- In the DYNAMIC and DYNAMIC PRO riding modes: high stability.
- In the ENDURO riding mode: minimum stability.
- In ENDURO PRO riding mode, dynamic engine brake control is disabled.

DYNAMIC ESA

- with Dynamic ESA^{OE}

Riding position compensation

The Dynamic ESA electronic chassis setting can automatically adapt your motorcycle to the load. If the spring setting is set to *Auto*, the rider does not have to worry about adjusting the load.

 BMW Motorrad recommends the *Auto* chassis and suspension adjustment.

When the motorcycle is started and while it is being driven, the system monitors the compression of the rear wheel and corrects the spring setting to ensure that the correct driving position is set. The damping is also automatically adjusted to the load.

Using ride height sensors, Dynamic ESA detects the movements of the chassis and suspension and responds to them by adjusting the EDC valves. As a result, the chassis and suspension is adjusted to the conditions of the surface. Dynamic ESA calibrates itself at regular intervals to ensure that the system is operating correctly.

Adjustment options

Damping modes

- Road: Damping for comfortable road travel
- Dynamic: Damping for dynamic road travel

Load settings

- Auto: Active riding position compensation with automatic setting of spring setting and damping (recommended chassis setting)
- Min: Minimum spring setting (only suitable for one-up mode)
- Max: Maximum spring setting (only suitable for two-up mode)

RIDING MODE

Selection

In order to adjust the motorcycle to the road condition and the desired riding experience, it is possible to select one of the following riding modes:

- RAIN
- ROAD (standard mode)
- with riding modes Pro^{OE}
- DYNAMIC
- DYNAMIC PRO

For each of these riding modes, there is a coordinated setting for the ABS and ASC/DTC systems as well as for the throttle response.

- with Dynamic ESA^{OE}

The coordination of the Dynamic ESA also depends on the selected riding mode.

ASC/DTC can be switched off in any riding mode. The following explanations always refer to the riding safety systems that are switched on.

Throttle response

- In RAIN riding mode: reserved
- In ROAD riding mode: direct
- In the DYNAMIC and DYNAMIC PRO riding modes: dynamic
- In the DYNAMIC PRO riding mode, the throttle response

148 TECHNOLOGY IN DETAIL

can be set differently via the SETUP (▣ 67).

ABS

- Rear wheel lift-off detection is active in all riding modes.
- In the RAIN, ROAD, DYNAMIC, and DYNAMIC PRO riding modes, the ABS is set for road use.
- with riding modes Pro^{OE}
- In the RAIN, ROAD, DYNAMIC, and DYNAMIC PRO riding modes, the ABS Pro is available to its full capacity. The stand-up tendency the motorcycle has when braking while traveling around curves is reduced to a minimum.

ASC

- Front wheel lift-off detection is active in all riding modes.
- ASC is attuned for road use.
- In the ROAD riding mode, ASC provides high riding stability, and in the RAIN riding mode it provides maximum riding stability.

-with riding modes Pro^{OE}

DTC

Tires

- In the DTC settings RAIN, ROAD and DYNAMIC, DTC is attuned for road use with road tires.

Riding stability

- In the DTC setting RAIN, the DTC intervenes early enough to ensure that maximum riding stability is achieved.
- In the DTC setting ROAD, the DTC intervenes later than in RAIN riding mode. Spinning of the rear wheel without traction is avoided wherever possible.
- In the DTC settings RAIN and ROAD, the front wheel is prevented from lifting off.
- In the DTC setting DYNAMIC, the DTC intervenes later than in the DTC setting ROAD, which enables minor drifts at the end of curves and brief wheelies.

In the RAIN, ROAD and DYNAMIC riding modes, the DTC settings corresponds to the riding mode.

In the DYNAMIC PRO riding mode, DTC can be set differently (▣ 69).

Switchover

Riding modes can be changed when the vehicle is at a standstill with the ignition switched on. A changeover while riding is possible under the following conditions:

- No drive torque at rear wheel.
- No brake pressure in the braking system.

For a changeover while riding, the following steps must be carried out:

- Turn back throttle grip.
- Do not actuate brake lever.
- Deactivate the adaptive cruise control.

First, the desired riding mode is preselected. The switchover does not take place until the affected systems are in the required state.

The Selection menu does not disappear from the display until the riding mode has been switched over.

DYNAMIC BRAKE CONTROL

-with riding modes Pro^{OE}

Dynamic Brake Control function

The Dynamic Brake Control function helps the rider in the event of emergency braking.

Detection of emergency braking

- Emergency braking is detected when the front wheel brake is applied quickly and with force.

Behavior during emergency braking

- If emergency braking is applied at a speed of more than 6 mph (10 km/h), in addition to the ABS function, the Dynamic Brake Control function will also be activated.
- In the event of partial braking with high brake pressure gradients, Dynamic Brake Control will increase the integral brake pressure on the rear wheel. This shortens the braking distance, enabling controlled braking.

Behavior in the event of accidental activation of the throttle grip

- If the throttle grip is accidentally actuated during emergency braking (throttle position >5%), the intended braking effect is ensured by the Dynamic Brake Control ignoring the opening process of the throttle grip. This ensures the effectiveness of emergency braking.
- If the gas is shut off (throttle position <5%) during the intervention of the Dynamic Brake Control, the engine torque required by the ABS brake system will be restored.

150 TECHNOLOGY IN DETAIL

–If the emergency braking is stopped and the throttle grip is still under actuation, the Dynamic Brake Control reduces the engine torque as required by the rider in a controlled manner.

TIRE PRESSURE CONTROL (RDC)

–with tire pressure monitor (TPM)^{OE}

Operation

A sensor located in each tire monitors the air temperature and the inflation pressure inside the tire and transmits this information to the control unit. The sensors are equipped with a centrifugal governor, which does not enable the transmission of the measured readings until the defined minimum speed is exceeded for the first time.



Minimum speed for transmission of RDC measured data:

min 19 mph (min 30 km/h)

Before the tire pressure is received for the first time, "--" is shown on the display for each tire. The sensors continue to transmit the measured read-

ings for some time after the vehicle comes to a stop.



Duration of measured data transmission after motorcycle is stationary:

min 15 min

If an RDC control unit is fitted but the wheels have no sensors, a fault message is generated.

Tire inflation pressure ranges

The RDC control unit distinguishes between three inflation pressure ranges matched to the motorcycle:

- Inflation pressure within the permissible tolerance.
- Inflation pressure at the limits of the permissible tolerance.
- Inflation pressure outside the permissible tolerance.

Temperature compensation

The tire inflation pressure is temperature dependent, i.e. it increases or decreases together with the tire air temperature. The tire temperature is dependent on the outside temperature, the riding style and the length of the journey.



The tire pressures are shown in the TFT display with temperature compensation and are always based on the following tire air temperature:

68 °F (20 °C)

Tire pressure gages at gas stations do not make any adjustment for the air temperature, the tire pressure indicated depends on the temperature of the air in the tire. As a result, in most cases the values displayed there do not match the values shown in the TFT display.

Tire pressure adjustment

Compare the RDC value in the TFT display with the value on the back cover of the operating instructions. The difference between the two values must be compensated with the tire inflation pressure tester at the filling station.



Example

According to the rider's manual, the tire pressure should have the following value:

36.3 psi (2.5 bar)



Example

The following value is displayed in the TFT display:

33.4 psi (2.3 bar)

Missing is thus:

2.9 psi (0.2 bar)

The tester at the filling station shows:

34.8 psi (2.4 bar)

To produce the correct tire pressure, this must be increased to the following value:

37.7 psi (2.6 bar)

GEAR SHIFT ASSISTANT

—with Gearshift Assistant Pro^{OE}

Shift assistant Pro

Your motorcycle is equipped with a Pro gearshift assistant originally developed for racing but now specially adapted for touring use. It allows you upshift and downshift under almost any load conditions and in virtually all engine-speed ranges without operating the clutch or accelerator.

152 TECHNOLOGY IN DETAIL

Benefits

- 70-80 % of all gear changes can be performed without using the clutch.
- Less movement between pilot and pillion due to shorter gear-change intervals.
- Throttle does not have to be closed when changing gear under acceleration.
- During deceleration and downshifts (throttle plate closed) the system blips the throttle to obtain the correct engine speed.
- Shifting times are faster than when the clutch is used to change gears.

For the system to detect the rider's intention to change gear, the gearshift lever previously not operated must be moved against the force of the spring by a certain amount of "over-travel" in the desired direction with a normal to brisk action and held in that position until the gear change is completed. A further increase of the force applied to the gearshift lever during the gear-shift operation is not necessary. After the gear change is completed, the gear lever must be fully released before the Pro gearshift assistant can execute a new

gear change. The load factor (throttle grip position) should remain constant both prior to and during execution of shifts using the Pro gearshift assistant. Changing the accelerator twist-grip position during the gear-shift operation may cause the function to abort and/or the gear change to fail. The Pro gearshift assistant does not provide support when gear changes are made using the clutch.

Downshifts

- Downshifts are assisted up to the speed at which the engine reaches maximum rpm in the gear to be engaged. Over-revving is thus prevented.



Maximum engine speed

max 9000 min⁻¹

Upshifts

- Upshifting is only possible if the current RPM is higher than the release threshold for the next higher gear.
- This prevents the idling speed from being dropped below.

	Idle speed
	1050 min ⁻¹ (Engine at operating temperature)
	Release thresholds
	1st gear
	min 1350 min ⁻¹
	2nd gear
	min 1400 min ⁻¹
	3rd gear
	min 1450 min ⁻¹
	4th gear
	min 1500 min ⁻¹
	5th gear
	min 1550 min ⁻¹
	6th gear
	min 1600 min ⁻¹

HILL START CONTROL

Hill Start Control function

The Hill Start Control prevents an uncontrolled rolling back on slopes by means of targeted intervention in the partial integral ABS brake system, without the rider having to continuously operate the brake lever. When Hill Start Control is activated, pressure builds in the rear brake system so that the motorcycle remains stationary on a sloping surface.

The brake pressure in the brake system depends on the gradient.

Influence of gradient on brake pressure and starting behavior

- Stopping on a slight incline builds up only a small amount of brake pressure. The brake is released quickly when driving off, making it possible to drive off more smoothly. Additional turning of the throttle grip is hardly necessary.
- Stopping on a steeper slope increases the amount of brake pressure built up. The brake is a bit slower to release when driving off. More torque is required to drive off, making additional turning of the throttle grip necessary.

Behavior when the vehicle is rolling or slipping

- The brake pressure increases when the vehicle is rolling with Hill Start Control active.
- If the rear wheel slips, the brake is released again after approx. 1 m. This prevents the vehicle from rolling with the rear wheel blocked.

Releasing the brake when switching off the engine or during timeout

Hill Start Control is deactivated when the engine is switched off using the emergency-off switch, when the side stand is folded out, or after it times out (10 minutes).

In addition to the indicator and warning lights, the rider is to be made aware about the deactivation of the Hill Start Control by the following behavior:

Brake warning jerk

- The brake is released briefly and is immediately reactivated.
- This causes a jerking behavior that the rider can feel.
- The partial integral ABS brake system sets a speed of approx. 1-2 km/h.
- The rider must brake the vehicle manually.
- After two minutes, or when the brake is applied, Hill Start Control is deactivated completely.

 When the ignition is switched off, the holding pressure is built up immediately and without brake warning jerk.

SHIFTCAM

Principle of ShiftCam function

The motorcycle is equipped with the BMW ShiftCam technology—a technique for varying the valve timing and the valve stroke on the intake side. The centerpiece of this technology is a one-piece intake trip camshaft that has two cams per valve to be actuated: one for partial load and one for full load. The partial load cam has been developed with regard to fuel economy optimization and smooth running. The partial load cam reduces both the valve timings adapted for this purpose and the intake valve stroke. Furthermore, the intake cams for the left and right intake valve differ in stroke and angle position when the partial load cam is activated. This causes a staggered opening of the two intake valves at different widths. The advantage is that the fuel-air mixture flowing into the combustion chamber is more strongly swirled and more effectively burned. Overall, this results in optimal fuel efficiency and noticeably improves the smoothness of running. The full load cam is optimized for performance and

releases the maximum intake valve stroke. In order to vary the valve timing and the valve stroke, the intake camshaft is shifted axially. For this purpose, the pins of an electromechanical actuator mesh with a shift gate on the intake camshaft. This allows for the actuation of the intake valves depending on load and motor speed and, as a result, an uncompromising symbiosis of performance and low fuel consumption.

MAINTENANCE

09

GENERAL NOTES	158
ONBOARD TOOL SET	159
SERVICE TOOL SET	159
FRONT-WHEEL STAND	159
REAR-WHEEL STAND	161
ENGINE OIL	162
BRAKE SYSTEM	164
CLUTCH	168
COOLANT	168
TIRES	169
WHEEL RIMS AND TIRES	170
WHEELS	171
SILENCER	177
LIGHT SOURCES	180
JUMP-STARTING	182
BATTERY	183
FUSES	187
DIAGNOSTIC SOCKET	189

GENERAL NOTES

The 'Maintenance' chapter describes work involving the checking and replacement of wear parts that can be performed with a minimum of effort.

Microencapsulated screws

The microencapsulation is a chemical threadlocker. An adhesive is used to create a solid connection between screw and nut or component. Microencapsulated screws, therefore, are suitable for single use only.

After removal, the internal thread must be cleaned to remove adhesive. During installation, a new microencapsulated screw must be used. Therefore, before removal, ensure that you have suitable tools for cleaning the thread and have a replacement screw. If you carry out the work improperly, the locking function of the screw might no longer be guaranteed, which puts you in danger!

Additional information

If special tightening torques are to be taken into account for installation, these are listed. An overview of all required tightening torques is contained in the chapter "Technical data". Information on additional preventive maintenance and repair procedures is provided in the repair manual for your motorcycle on DVD, which you can obtain from your authorized BMW Motorrad retailer.

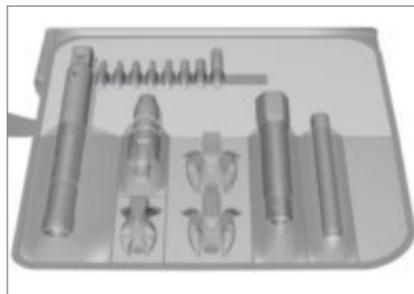
Special tools and thorough specialized knowledge are required to carry out some of the work described here. If you are in doubt, consult a specialist workshop, preferably your authorized BMW Motorrad retailer.

ONBOARD TOOL SET

- 1** Screwdriver handle
–Use with screwdriver insert
–Topping up the engine oil (➡ 163).
- 2** Open-ended wrench
Key range: 8/10 mm
–Removing battery (➡ 185).
- 3** Open-ended wrench
Key range: 14 mm
- 4** Reversible screwdriver insert
Phillips PH1 and Torx T25
–Remove light sources in front and rear turn indicators (➡ 180).
–Reposition windshield (➡ 109).
- 5** Torx wrench T40

SERVICE TOOL SET

–with service tool set^{OA}



For expanded servicing (e.g. installing and removing wheels), BMW Motorrad has set up a service toolkit designed for your motorcycle. You can obtain the toolkit from your BMW Motorrad retailer.

FRONT-WHEEL STAND**Mount front wheel stand****ATTENTION**

Use of the BMW Motorrad front wheel stand without an auxiliary stand

Component damage cause by tipping over

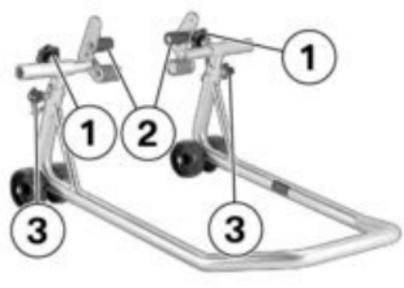
- Place the motorcycle on an auxiliary stand before lifting the front wheel with the BMW Motorrad front-wheel stand.

- Place motorcycle on a suitable auxiliary stand.

160 MAINTENANCE

–with center stand^{OE}

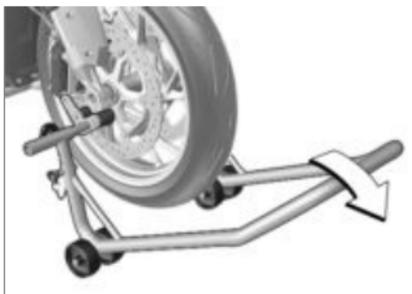
- Place motorcycle on center stand, ensuring that it is resting on a firm and level support surface.◀
- Use basic stand with front wheel mount. The base stand and its accessories are available through your authorized BMW Motorrad retailer.



- Loosen mounting bolts **1**.
- Push the two mounts **2** outward, continuing until front suspension fits between them.
- Use locating pins **3** to set front wheel stand to desired height.
- Center front wheel stand relative to front wheel and push it against front axle.



- Align the two mounts **2** so that front suspension rests securely on them.
- Tighten securing screws **1**.



- Apply uniform pressure to push front wheel stand down and raise motorcycle.

–with center stand^{OE}



ATTENTION

Lifting off the center stand if the vehicle is raised too high

Component damage caused by tipping over

- When raising the motorcycle, make sure that the center stand remains in contact with the ground.
- Adjust the height of the front wheel stand as necessary.

- Ensure that motorcycle is standing securely.◁

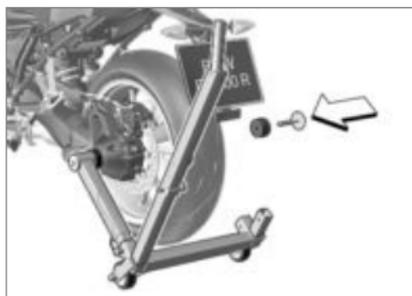
REAR-WHEEL STAND

Mounting rear-wheel stands

- Park motorcycle, ensuring that support surface is firm and level.
- Use basic stand with rear wheel adapter. The basic stand and its accessories are available through your authorized BMW Motorrad retailer.



- Set desired height of rear-wheel stand using bolts **1**.
- Remove the lock washer **2**; to do so, press the unlock button **3**.



- Push the rear-wheel stand from the right onto the rear axle.
- Apply the retaining disk from the left; to do so, press the unlock button.

162 MAINTENANCE



- Position motorcycle upright while simultaneously pressing grip of stand back so that both stand rollers rest on ground.
- Then press the grip down to the ground.

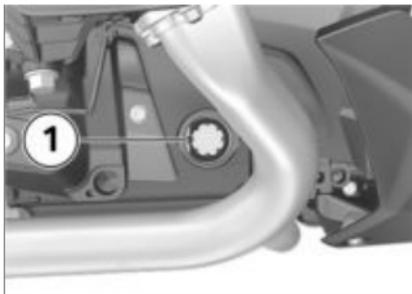
ENGINE OIL

Checking engine oil level

 It is possible to misinterpret the oil capacity as the oil level depends on the temperature.

- Hold the motorcycle upright, making sure that the ground is firm and level.
 - with center stand^{OE}
- Make sure the ground is level and firm and put the motorcycle up on its center stand.<
- Run the engine at neutral until the fan starts.
- Switch off engine at operating temperature.
- Wait five minutes to allow oil to drain into the oil pan.

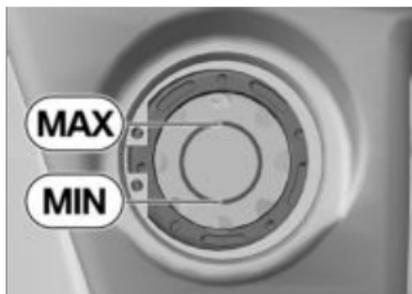
 BMW Motorrad recommends occasionally checking the motor oil after a journey of at least 31 mi in order to reduce the environmental impact.



ATTENTION

Lateral tipping of the vehicle
Component damage cause by tipping over

- Secure the vehicle from tipping over laterally, preferably with the support of a second person.
- Read oil level on the display **1**.



Specified level of engine oil

Between MIN and MAX mark

If the oil level is below the minimum mark:

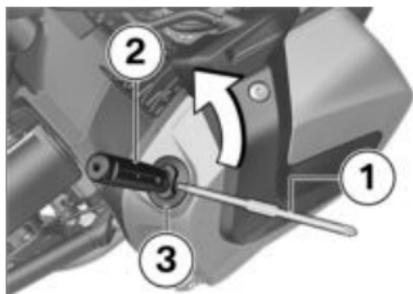
- Topping up the engine oil (▮▮▮▮ 163).

If the oil level is above the maximum mark:

- Have the oil level corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Topping up the engine oil

- Park motorcycle on a level, firm surface.



- Wipe the area around the oil filler opening clean.
- To be able to apply force more easily, insert the interchangeable screwdriver insert **1** Torx-end first, into the screwdriver handle **2** (from on-board tool kit).
- Position the specified tool from the on-board tool kit on the cap **3** of the oil filler opening and turn counter-clockwise to remove it.
- Checking engine oil level (▮▮▮▮ 162).



ATTENTION

Use of too little or too much engine oil

Engine damage

- Always make sure that the oil level is correct.

- Top up the engine oil to the specified level.

164 MAINTENANCE



Engine oil, quantity for topping up

max 0.8 quarts (max 0.8 l)
(Difference between MIN and MAX)

- Checking engine oil level (→ 162).
- Install the cap **3** of the oil filler opening.

BRAKE SYSTEM

Check brake operation

- Actuate the handbrake lever.
 - » Pressure point must be clearly perceptible.
- Actuate the footbrake lever.
 - » Pressure point must be clearly perceptible.

If no clear pressure point can be felt:



ATTENTION

Improper working on the brake system

Endangering of the operating safety of the brake system

- Have all work on the brake system carried out by experts.
- Have the brakes checked at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Check front brake pad thickness

- Park motorcycle, ensuring that support surface is firm and level.



- Visually inspect left and right brake pads to determine their thickness. Viewing direction: between wheel and front suspension toward brake pads **1**.



 Front brake-pad wear limit

0.04 in (1.0 mm) (Only friction material without carrier plate. Wear markings (grooves) must be clearly visible.)

If the wear indicators are no longer clearly visible:



WARNING

Dropping below the minimum pad thickness

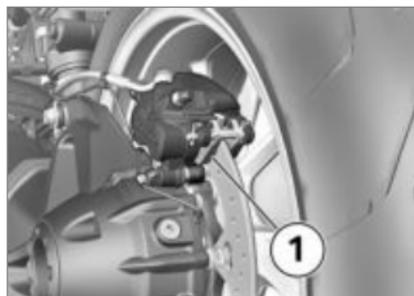
Reduced braking action, damage to the brake

- In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.

- Have brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.

Checking rear brake pad thickness

- Park motorcycle, ensuring that support surface is firm and level.



- Conduct a visual inspection of the brake pad thickness. Direction of view: From rear looking at brake pads **1**.



 Rear brake-pad wear limit

0.04 in (1.0 mm) (Only friction material without carrier plate)

166 MAINTENANCE

If wear limit is reached:



WARNING

Dropping below the minimum pad thickness

Reduced braking action, damage to the brake

- In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.
- Have brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.

Checking the front brake fluid level



WARNING

Insufficient or contaminated brake fluid in the brake fluid reservoir

Considerably reduced braking power caused by air, dirt or water in the brake system

- Stop riding immediately until fault is rectified.
- Check brake fluid level regularly.
- Make sure that the lid of the brake fluid reservoir is cleaned before opening.
- Make sure that brake fluid is used from a sealed container only.
- Make sure ground is level and firm and hold motorcycle vertically.
—with center stand^{OE}
- Make sure the ground is level and firm and place the motorcycle on its center stand.<
- Align handlebars so that brake-fluid reservoir is positioned horizontally.



- Check brake fluid level at brake fluid reservoir for front wheel brake **1**.

 The brake fluid level in the brake-fluid reservoir drops due to brake pad wear.



Front brake fluid level

Brake fluid, DOT4

The brake fluid level must not fall below the MIN mark. (Brake-fluid reservoir horizontal, motorcycle standing upright)

If brake fluid level falls below the approved level:

- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorized BMW Motorrad dealer.

Check the rear brake fluid level

WARNING

Insufficient or contaminated brake fluid in the brake fluid reservoir

Considerably reduced braking power caused by air, dirt or water in the brake system

- Stop riding immediately until fault is rectified.
- Check brake fluid level regularly.
- Make sure that the lid of the brake fluid reservoir is cleaned before opening.
- Make sure that brake fluid is used from a sealed container only.

- Make sure ground is level and firm and hold motorcycle vertically.

—with center stand^{OE}

- Make sure the ground is level and firm and place the motorcycle on its center stand.◁



- Check brake fluid level at brake fluid reservoir for rear wheel brake **1**.

 The brake fluid level in the brake-fluid reservoir drops due to brake pad wear.



Rear brake fluid level

Brake fluid, DOT4

The brake fluid level must not fall below the MIN mark. (Brake-fluid reservoir horizontal, motorcycle standing upright)

If brake fluid level falls below the approved level:

- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorized BMW Motorrad dealer.

CLUTCH

Check clutch function

- Pull back the clutch lever.
 - » Pressure point must be clearly perceptible.

If no clear pressure point can be felt:

- Have the clutch checked by an authorized workshop, preferably an authorized BMW Motorrad retailer.

COOLANT

Checking coolant level

- Make sure ground is level and firm and hold motorcycle vertically.
 - with center stand^{OE}
- Place motorcycle on center stand, ensuring that it is resting on a firm and level support surface.◁

**CAUTION****Hot engine**

Burn hazard

- Maintain a safe distance from the hot engine.
- Do not touch the hot engine.

- Read the coolant level on the expansion tank **1**.
 - » Coolant level must be between MIN and MAX marks.
- If coolant level drops below MIN mark:
- Add coolant.

Topping up coolant

- Open cap **1** of coolant expansion tank and add coolant up to specified level.
- » Coolant level lies between MIN and MAX markings.
- Close cap **1**.

TIRES**Checking tire pressure****WARNING****Incorrect tire inflation pressure**

Poorer handling characteristic of motorcycle, reduction of tire service life

- Ensure proper tire inflation pressure.

170 MAINTENANCE



WARNING

Automatic opening of vertically installed valve inserts at high speeds

Sudden loss of tire inflation pressure

- Use valve caps with rubber sealing ring and screw on firmly.
- Park motorcycle, ensuring that support surface is firm and level.
- Check tire pressures against data below.



Front tire pressure

36.3 psi (2.5 bar) (One-up, with cold tires)

36.3 psi (2.5 bar) (Two-up mode with load, with cold tires)

36.3 psi (2.5 bar) (Sporting use)



Rear tire pressure

42.1 psi (2.9 bar) (One-up, with cold tires)

42.1 psi (2.9 bar) (Two-up mode with load, with cold tires)

42.1 psi (2.9 bar) (Sporting use)

If tire pressure is too low:

- Correct tire pressure.

WHEEL RIMS AND TIRES

Check wheel rims

- Park motorcycle, ensuring that support surface is firm and level.
- Subject wheel rims to visual inspection for defects.
- Have damaged rims checked and, if necessary, replaced by a specialist service facility, preferably an authorized BMW Motorrad retailer.

Checking tire tread depth



WARNING

Riding with heavily worn tyres

Risk of accident due to poorer rideability

- If necessary, replace the tyres before the legally specified minimum tread depth is reached.
- Park motorcycle, ensuring that support surface is firm and level.
- Check tire tread depth in main tread grooves with wear indicators.

 Tread wear marks are integrated into the main grooves on every tire. If the tire tread has worn down to the level of the marks, the tire is completely worn. The locations of the marks are indicated on the edge of the tire, e.g. by the letters TI, TWI or by an arrow.

When the minimum tread depth is reached:

- Replace the worn tires.

WHEELS

Affect of wheel sizes on suspension control systems

The wheel sizes play a major role in the ABS and ASC/DTC suspension-control systems. The diameter and width of the wheels stored in the control unit have particular significance as the basis for all necessary calculations. A change in these sizes resulting from conversion to wheels not installed as standard equipment can seriously affect the control efficiency of these systems.

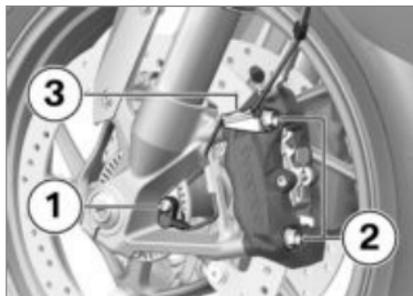
The sensor rings required for wheel speed detection must also match the installed control systems and may not be replaced.

If you want to equip your motorcycle with different

wheels, please contact a specialist service facility, preferably a BMW Motorrad retailer. In some cases the data stored in the control units can be adapted for the new wheel sizes.

Removing front wheel

- Make sure ground is level and firm and hold motorcycle vertically.
 - with center stand^{OE}
- Make sure the ground is level and firm and place the motorcycle on its center stand.<



- Remove screw **1** and remove wheel speed sensor from the bore.
- Mask off areas of wheel rim that could be scratched in the process of removing the brake calipers.

172 MAINTENANCE

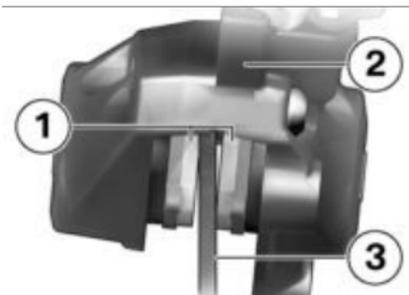
ATTENTION

Unintentional pressing together of brake pads

Component damage when mounting the brake caliper or when pressing the brake pads apart

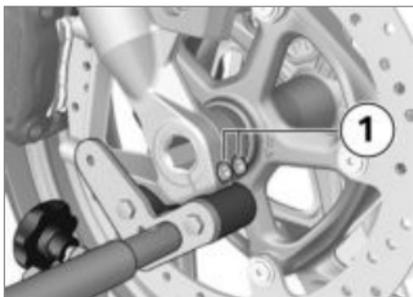
- Do not actuate the brakes with the brake caliper removed.

- Remove securing screws **2** on left and right of brake caliper and take off holding clip **3**.

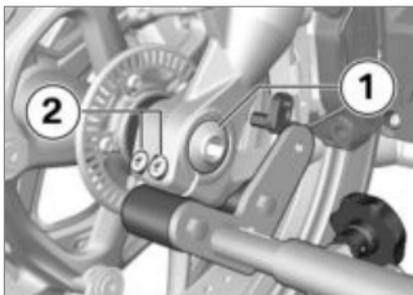


- Push brake pads **1** apart slightly by turning the brake caliper **2** back and forth against brake disc **3**.
- Carefully pull brake calipers back and outward to remove them from brake rotors.

- Raise front of motorcycle, preferably using a BMW Motorrad front wheel stand, continuing until the wheel rotates freely.
- Mount front wheel stand (→ 159).

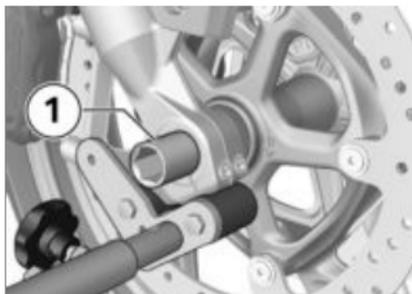


- Loosen axle clamping screws **1**.



- Remove the screw **1**.
- Loosen axle clamping screws **2**.
- Slightly press the quick-release axle inward for a better grip on the right side.

Installing front wheel



- Pull quick-release axle **1** out while supporting the front wheel.
- Place front wheel down and roll it forward out of the front suspension.



- Remove spacer bushing **1** from the wheel hub.

WARNING

Use of a wheel which does not comply with series specifications

Malfunctions during control interventions by ABS and ASC/DTC

- Please see the information on the effect of wheel sizes on the ABS and ASC/DTC chassis control systems at the beginning of this chapter.

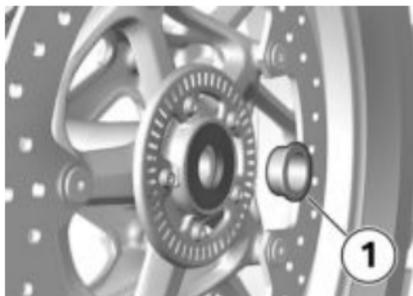
ATTENTION

Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.

174 MAINTENANCE



- Insert the spacer bushing **1** on the left side in the wheel hub.

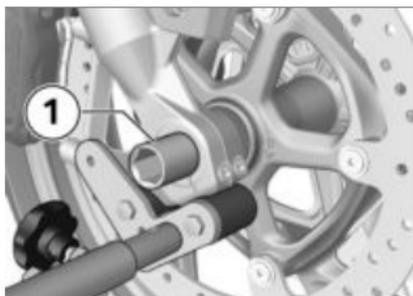


ATTENTION

Front wheel installation opposite the running direction

Accident hazard

- Observe running direction arrows on tire or rim.
- Roll the front wheel into the front suspension.



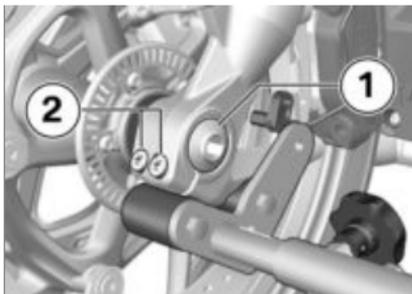
- Lubricate the quick-release axle **1**.



Lubricant

Optimoly TA

- Lift front wheel and install quick-release axle **1**.
- Remove front wheel stand and firmly compress front forks. Do not actuate hand-brake lever at the same time.
- Mount front wheel stand (→ 159).



- Install screw **1** with specified torque. Brace quick-release axle on the right side at the same time.



Quick-release axle in telescopic fork

37 lb/ft (50 Nm)

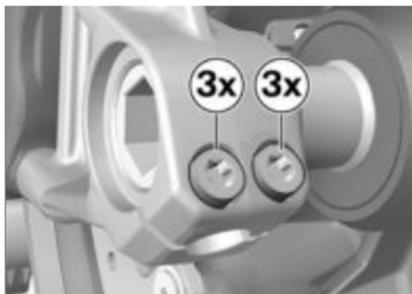
- Tighten axle clamping screws **2** to appropriate torque.



 Clamping screw for quick-release axle in telescopic fork

Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time

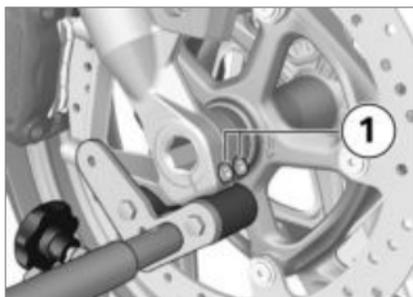
14 lb/ft (19 Nm)



 Clamping screw for quick-release axle in telescopic fork

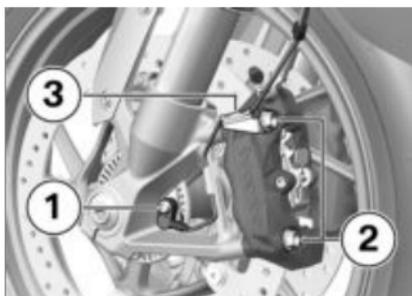
Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time

14 lb/ft (19 Nm)



- Tighten axle clamping screws **1** to appropriate torque.

- Remove the front-wheel stand.
- Slide the brake calipers on the left-hand and right-hand side onto the brake rotors.



- Install holding clip **3** on left and fit securing screws **2** on left and right and tighten to appropriate torque.

176 MAINTENANCE



Brake caliper on telescopic forks

28 lb/ft (38 Nm)

- Remove adhesive tape from wheel rim.



WARNING

Brake pads do not contact the brake disc

Risk of accident due to delayed braking effect.

- Before driving off, check that the braking effect kicks in without any delay.
- Engage the brakes repeatedly, continuing until the brake pads seat against the rotors.
- Insert cable for wheel speed sensor in holding clip **3**.
- Insert the wheel speed sensor into the bore and fit screw **1**.



Wheel speed sensor on fork

Joint compound: Micro-encapsulated or medium-strength screw lock

6 lb/ft (8 Nm)

Removing rear wheel

- Removing the silencer (▶▶ 177).



- Shift into first gear.
- Remove bolts **1** of rear wheel, holding wheel as you do so.
- Roll rear wheel out toward rear.

Installing rear wheel



WARNING

Use of a wheel which does not comply with series specifications

Malfunctions during control interventions by ABS and ASC/DTC

- Please see the information on the effect of wheel sizes on the ABS and ASC/DTC chassis control systems at the beginning of this chapter.

ATTENTION

Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.

- Place rear wheel on rear wheel support.



- Install wheel studs **1** with specified torque.



Tighten rear wheel on wheel flange

Tightening sequence: Tighten crosswise

44 lb/ft (60 Nm)

- Installing the silencer ( 178).

SILENCER

Removing the silencer

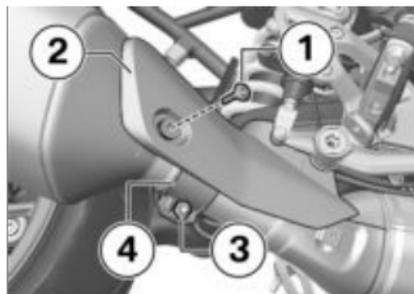
CAUTION

Hot exhaust system

Burn hazard

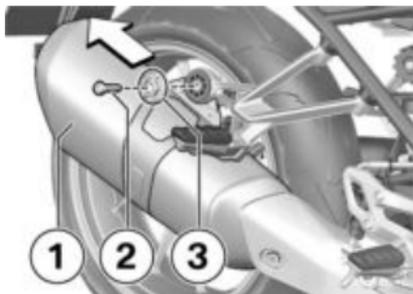
- Do not touch hot exhaust system.

- Let rear muffler cool down.
- Make sure ground is level and firm and place motorcycle on a suitable auxiliary stand. BMW Motorrad recommends the BMW Motorrad rear-wheel stand.
- Mounting rear-wheel stands ( 161).
 - with center stand^{OE}
- Make sure the ground is level and firm and place the motorcycle on its center stand.◁



- Remove screw **1** from cover **2**.
- Remove screw **3** from cir-clip **4**.

178 MAINTENANCE



- Remove screw **2** and shim **3**.
- Remove silencer **1**.

–with M sports muffler^{OE}



CAUTION

Hot exhaust system

Burn hazard

- Do not touch hot exhaust system.

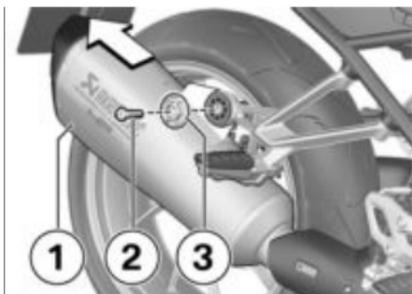
- Let end muffler cool down.
- Make sure ground is level and firm and place motorcycle on a suitable auxiliary stand. BMW Motorrad recommends the BMW Motorrad rear-wheel stand.
- Mounting rear-wheel stands (→ 161).

–with center stand^{OE}

- Make sure the ground is level and firm and put the motorcycle on its center stand.◁

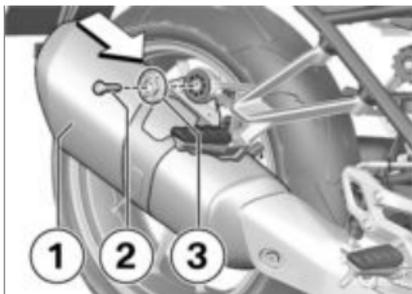


- Unscrew nut **1** to push the clamp **2** to the rear.



- Remove screw **2** and shim **3**.
- Remove silencer **1**.◁

Installing the silencer

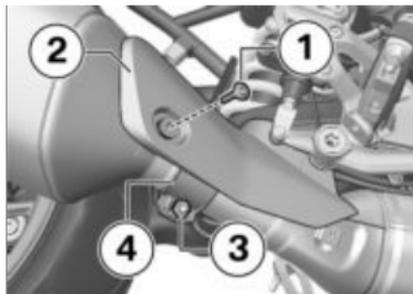


- Push the circlip onto the silencer.
- Push silencer **1** up to the stop.

- Install screw **2** and shim **3**.

 Muffler on rear frame

14 lb/ft (19 Nm)



- Tighten nut **3** of circlip **4**.

 Clamp on muffler and exhaust manifold

16 lb/ft (22 Nm)

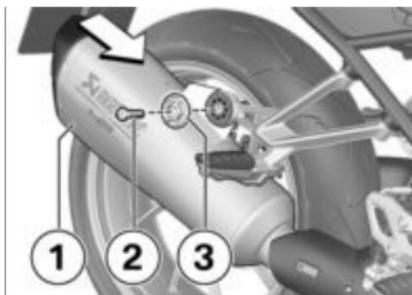
- Install screw **2** of cover **1**.
- with M sports muffler^{OE}

ATTENTION

Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.



- Push the circlip onto the silencer.
- Push silencer **1** up to the stop.
- Install screw **2** and lock washer **3**.

 Muffler on rear frame

14 lb/ft (19 Nm)



- Tighten nut **1** of circlip **2**.

 Clamp on muffler and exhaust manifold

16 lb/ft (22 Nm)◁

180 MAINTENANCE

LIGHT SOURCES

Replacing front and rear turn indicator light sources

- Park motorcycle, ensuring that support surface is firm and level.
- Switch off ignition.



- Remove the screw **1**.



- Remove the lens from the housing by pulling it outward on the side with the screw.

- To prevent contaminants from being deposited on the glass surface, always use a clean, dry cloth to hold the light source.

- Remove bulb **1** from light housing by turning it counterclockwise.

- Replace defective light source.



Bulbs for flashing turn indicators

RY10W / 12 V / 10 W



Bulbs for flashing turn indicators, rear

RY10W / 12 V / 10 W



- Install light source **1** by turning clockwise in light housing.



- Insert inside end of lens into light housing and close it.



- Install screw **1**.

Replacing LED tail light

The LED tail light can only be completely replaced.

- For details please contact a specialist service facility, preferably an authorized BMW Motorrad Dealer.

Replace LED headlights

- LED headlights can only be replaced as a complete unit. For details please contact a specialist service facility, preferably an authorized BMW Motorrad Retailer.

Replace additional LED headlight

–with LED additional headlight^{OA}

The LED additional headlights can only be completely replaced; it is not possible to replace individual LEDs. Please contact a specialist service facility, preferably an authorized BMW Motorrad retailer.

182 MAINTENANCE

JUMP-STARTING

ATTENTION

Current too high when jump-starting the motorcycle

Cable fire or damage to the motorcycle electronics

- Do not jump-start the motorcycle using the power socket, only via the battery terminal.

ATTENTION

Contact between crocodile clips of jump leads and motorcycle

Danger of short circuit

- Use jump leads fitted with fully insulated crocodile clips at both ends.

ATTENTION

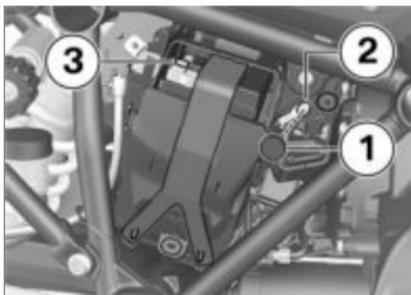
Jump-starting with a voltage higher than 12 V

Damage to the motorcycle's electronics

- The battery of the donor motorcycle must have a voltage of 12 V.

- Park motorcycle on a level, firm surface.
- Remove battery cover (▶▶▶ 185).

- Do not disconnect the battery from the onboard electrical system when jump-starting the engine.



- Remove protective cap **1**.
- Begin by connecting the red jump lead to the positive battery connection point **2** on the drained battery and the other end to the positive terminal of the donor battery.
- Then clamp one end of the black jump lead to the donor battery's negative terminal **3** while connecting the other end to the drained battery's negative terminal.
- Run engine of donor motorcycle during jump-starting procedure.
- Start engine of vehicle with discharged battery in usual way; if engine does not start, wait a few minutes before repeating attempt in order to protect starter motor and donor battery.

- Allow both engines to idle for a few minutes before disconnecting jumper cables.
- Disconnect jumper cable from negative terminals first, then disconnect second cable from positive terminals.

 To start the engine, do not use start sprays or similar items.

- Install the protective cap.
- Installing battery cover (➡ 187).

BATTERY

Maintenance instructions

Correct battery maintenance combined with proper charging and storage procedures extends the battery's service life, and is also required for warranty claims.

Compliance with the points below is important in order to maximize battery life:

- Keep the surface of the battery clean and dry.
- Do not open the battery.
- Do not top up with water.
- Be sure to read and comply with the instructions for charging the battery on the following pages.
- Do not turn the battery upside down.



ATTENTION

Discharging of the connected battery by the vehicle electronics (e.g. clock)

Total discharge of battery leading to a rejection of warranty claims

- During riding breaks of more than 4 weeks, connect a trickle-charger to the battery.



BMW Motorrad has developed a trickle-charger specially designed for compatibility with the electronics of your motorcycle. Using this charger, you can keep the battery charged during long periods when the motorcycle is not being used without having to disconnect the battery from the motorcycle's onboard systems. Additional information is available at your authorized BMW Motorrad retailer.

184 MAINTENANCE

Charge connected battery



ATTENTION

Charging the battery connected to the vehicle using the battery terminals

Damage to the motorcycle's electronics

- Disconnect the battery before charging on the battery terminals.



ATTENTION

A fully discharged battery must be charged via a power socket or extra socket.

Damage to vehicle electronics

- A fully discharged battery (battery voltage less than 12 V, indicator lights and multifunction display remain off when ignition is switched on) must always be charged directly at the poles of the **disconnected** battery.



ATTENTION

Unsuitable chargers connected to the power socket

Damage to charger and vehicle electronics

- Use suitable BMW chargers. The correct charger is available through your authorized BMW Motorrad retailer.

- Charge disconnected battery via onboard socket.



The motorcycle's onboard electronics know when the battery is fully charged. The onboard socket is switched off when this happens.

- Comply with operating instructions of charger.



If you are unable to charge the battery via the onboard socket, you may be using a charger that is not compatible with your motorcycle's electronics. In this case, charge the battery directly from the terminals of the battery disconnected from the vehicle.

Charging disconnected battery

- Charge battery using a suitable charger.

- Comply with operating instructions of charger.
- Once battery is fully charged, disconnect charger's terminal clips from battery terminals.

 In the case of longer periods when the motorcycle is not being used, the battery must be recharged regularly. See the instructions for caring for your battery. Always fully recharge the battery before returning it to use.

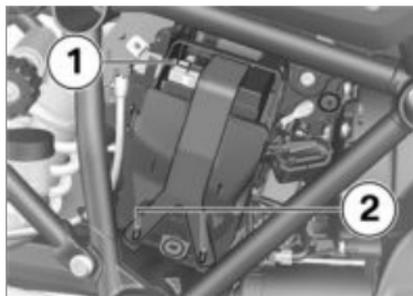
Removing battery



- Switch off ignition.
- Remove screw **1**.
- Pull battery cover at top slightly forward at positions **2**.
- Remove the battery cover upward at position **3** in order not to damage the battery cover and the mount.

–with anti-theft alarm system (DWA)^{OE}

- Switch off anti-theft alarm system if necessary.<



- Release the battery earth lead **1** and rubber strap **2**.



- Pull mounting plate on position **1** outwards and remove it upwards.
- Lift battery slightly out of holder sufficiently for positive terminal to be accessible.

186 MAINTENANCE



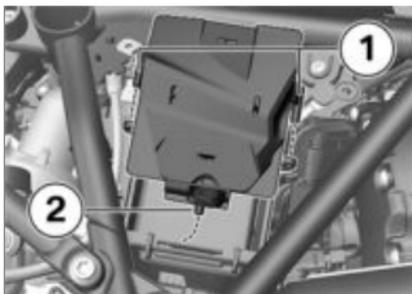
- Remove positive battery cable **1** and pull out battery.

Install battery

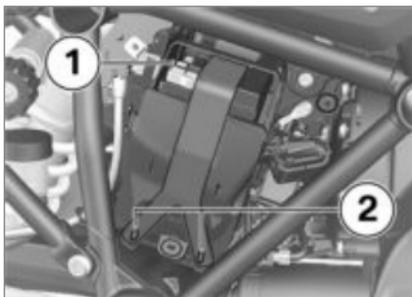
 If the 12-V battery is inserted incorrectly or the terminals reversed (e.g. when jump starting), it can blow the fuse for the alternator regulator.



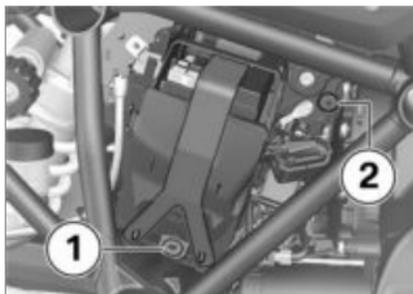
- Fasten positive battery cable **1**.
- Slide battery into holder.



- First press retaining plate into the mounts **1** and then press under the battery at point **2**.



- Fasten negative battery cable **1**.
- Fasten battery with rubber strap **2**.



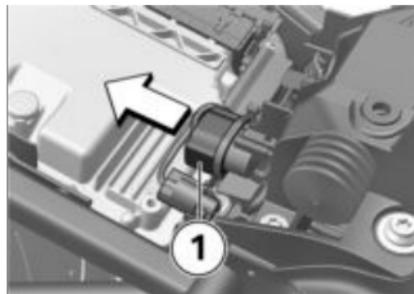
- Insert battery cover into mount **1** and press it into the mount **2**.



- Install screw **1**.
- Setting the clock (➡ 93).
- Setting the date (➡ 92).

FUSES

Replacing fuses



- Switch off ignition.
- Remove rider's seat (➡ 80).
- Detach plug **1**.

ATTENTION

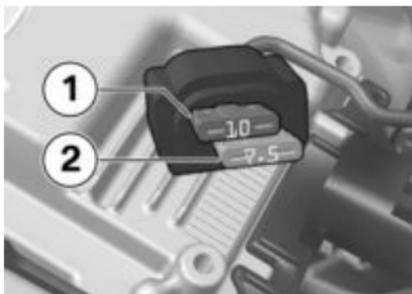
Bypassing defective fuses

Risk of short circuit and fire

- Do not bypass defective fuses.
 - Replace defective fuses with new fuses.
- Consult the fuse assignment diagram and replace the defective fuse.
-  If the fuses blow frequently, have the electrical system checked by an authorized specialized workshop, preferably an authorized BMW Motorrad retailer.
- Insert connector **1**.
 - Installing driver's seat (➡ 80).

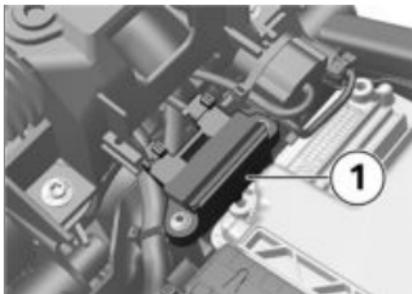
188 MAINTENANCE

Fuse assignment



- 1** 10 A
 - Instrument cluster
 - Anti-theft alarm system (DWA)
 - Ignition lock
 - Main relay
 - Diagnostic socket
- 2** 7.5 A
 - Multifunction switch, left
 - Tire pressure control (RDC)
 - Angular rate sensor

Fuse for the alternator regulator



- 1** 50 A
 - Alternator regulator

DIAGNOSTIC SOCKET

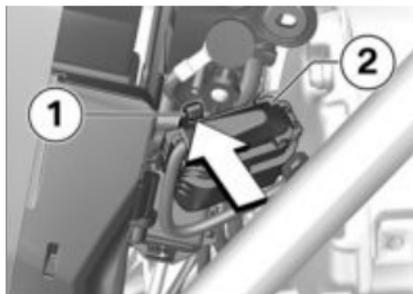
Removing the diagnostic connector

CAUTION

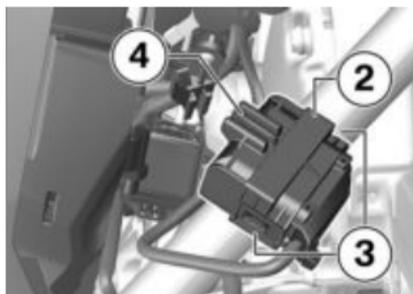
Incorrect procedure followed when disconnecting the data link connector for the On-Board Diagnostics.

Motorcycle experiences malfunctions

- Only have the data link connector disconnected by a specialist workshop or other authorized persons during your next BMW Service appointment.
 - Have the work performed by appropriately trained staff.
 - Refer to the vehicle manufacturer specifications.
- Remove battery cover (→ 185).



- Push on hook **1** and pull data link connector **2** up and out.

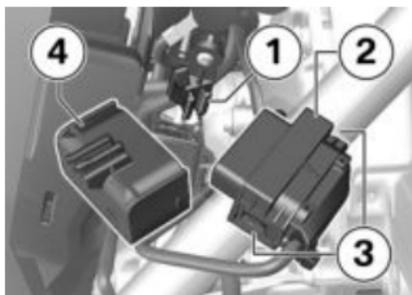


- Press locks **3** on both sides.
 - Remove data link connector **2** from bracket **4**.
- » The diagnosis and information system interface can be connected at the diagnostic connector **2**.

Secure the data link connector

- Disconnect the diagnosis and information system interface.

190 MAINTENANCE



- Insert data link connector **2** into bracket **4**.
» Locks **3** engage on both sides.
- Mount bracket **4** onto fixture **1**.



- Make sure that hook **5** engages.
- Installing battery cover (☞ 187).

ACCESSORIES

10

GENERAL NOTES	194
ONBOARD POWER SOCKETS	194
CASE	195
TOPCASE	198
NAVIGATION SYSTEM	200

GENERAL NOTES



CAUTION

Use of products from other manufacturers

Safety risk

- BMW Motorrad cannot examine or test each product of outside origin to ensure that it can be used on or in connection with BMW motorcycles without constituting a safety hazard. Nor is this guarantee provided when the official approval of a specific country has been granted. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW motorcycles and, consequently, they are not sufficient in some circumstances.
- Use only parts and accessories approved by BMW for your motorcycle.

The safety, operation and suitability of the parts and accessory products have been thoroughly checked by BMW. Therefore, BMW assumes responsibility for these products. BMW will not be held liable for unapproved

parts and accessory products of any kind.

Comply with legal requirements for any modifications. The motorcycle must not violate the regulations governing motorcycle approval for highway use applicable in your own country.

Your BMW Motorrad retailer offers you expert advice when choosing genuine BMW parts, accessories and other products. More information on the topic of accessories is available at: bmw-motorrad.com/equipment

ONBOARD POWER SOCKETS

Connection of electrical devices

- The ignition must be switched on before electrical devices connected to the power sockets can be operated.

Cable routing

- The cables from the onboard sockets to the auxiliary devices must be routed in such a way that they do not impede the rider.
- Cable routing must not restrict the steering angle and the handling characteristics.
- Cables must not be trapped.

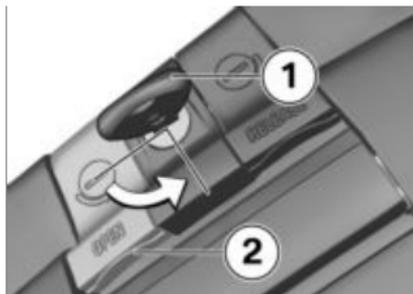
Automatic deactivation

- The onboard sockets are automatically switched off during starting.
- These sockets are switched off approx. 15 minutes after switching off the ignition to reduce the strain on the onboard electrical system. Additional devices with low power consumption are possibly not detected by the vehicle electronics. In these cases, onboard sockets are already switched off shortly after the ignition is switched off.
- In case of insufficient battery voltage, the onboard sockets are switched off to maintain the ability to start the motor-cycle.
- If the maximum loadability specified in the technical data is exceeded, the onboard sockets are switched off.

CASE

- with touring case^{OA}

Opening case



- Turn the key **1** counterclockwise to the **OPEN** position.
- Pull the gray release lever **2** (**OPEN**) upward and simultaneously open the case lid.

Closing case

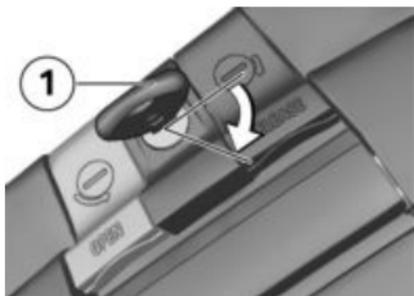


- Turn the key **1** counterclockwise to the **OPEN** position.
- Press the catches **2** of the case lid into the locking mechanisms **3**. Ensure that no objects are trapped between lid and case.
- Pull the gray release lever **4** (**OPEN**) upward and simultaneously close the case lid.
- » The lid engages audibly.

196 ACCESSORIES

- Turn the key **1** in the case lock so that it is in the direction of travel and remove.

Remove case

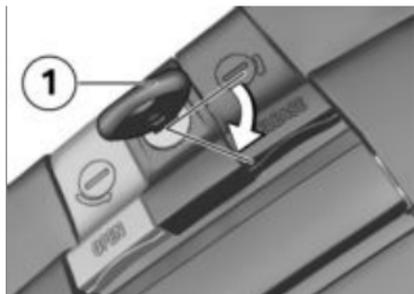


- Turn key **1** to position RELEASE.

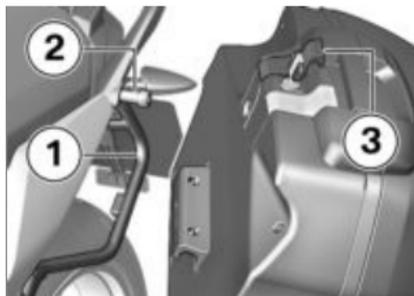


- Pull black release lever **1** (RELEASE) upward while simultaneously pulling the case outward.
- Then lift case out of lower mounting.

Attaching a case



- Turn the key **1** to RELEASE position.



- Insert the case in the case carrier **1**, then swing as far as possible onto mount **2**.
- Pull the black release lever **3** (RELEASE) upward while simultaneously pushing the case into the upper mount **2**.
- Press the black release lever **3** (RELEASE) down until it engages.
- Turn the key in the case lock in the direction of travel and remove it.

Maximum payload and top speed

Note the maximum permissible payload and the speed limit for riding with cases fitted, as stated on the label inside the case.

If you cannot find your combination of vehicle and case on the sign, contact your BMW Motorrad partner. The following values apply for the combination described here:

	Maximum speed for riding with case
	max 112 mph (max 180 km/h)
	Payload per case
	max 22 lbs (max 10 kg)

Secure hold



If a case wobbles or is difficult to fit, it must be adapted to the gap between the upper and lower mount.

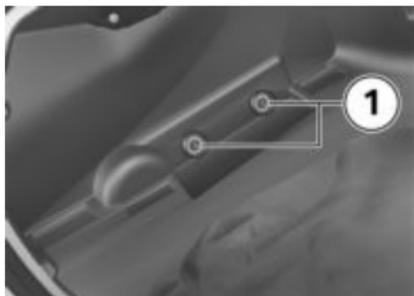


WARNING

Improperly installed case.
Impairment of riding safety.

- Cases may not shake and must be fastened play-free. If some play is determined after longer use, readjust the retaining claw.

198 ACCESSORIES



Use the screws **1** inside the case for this purpose.

TOPCASE

–with topcase^{OA}

Opening the topcase



- Turn the key in the topcase lock to position **1**.



- Press the lock cylinder **1** to the front.
» The release lever **2** pops up.

Close topcase



- Pull release lever **1** all the way up.
- Close topcase lid and hold it down. Ensure that no items are trapped between cover and case.

 You can also lock the topcase by turning the lock to the **LOCK** position. Under such circumstances, ensure that the key is not in the topcase.



- Press release lever **1** down until it engages.
- Turn key in topcase lock into LOCK position and remove.

Remove topcase



- Turn key in Topcase lock into Position **1**.
» Handle pops out.



- Fold handle **1** all the way up.

- Raise the rear of the topcase and pull it off luggage rack.

Mounting topcase



WARNING

Topcase not properly secured

Driving safety is impaired

- Topcase must not shake and must be fastened clearance-free.

- Fold up handle as far as possible.



- Hook topcase into luggage rack. Make sure that hooks **1** engage securely in their mounts **2**.

200 ACCESSORIES



- Press handle **1** down until it engages.



- Turn key in Topcase lock into Position **1** and remove.

Maximum payload and top speed

Note the maximum permissible payload and the speed limit for riding with topcase fitted, as stated on the label inside the topcase.

If you cannot find your combination of motorcycle and topcase on the sign, contact your authorized BMW Motorrad retailer.

The following values apply for the combination described here:

	Maximum speed when riding with loaded Vario topcase
---	---

max 112 mph (max 180 km/h)

	Payload of Vario topcase
---	--------------------------

max 11 lbs (max 5 kg)

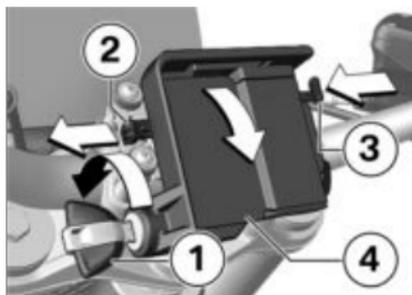
NAVIGATION SYSTEM

Fasten navigation system securely

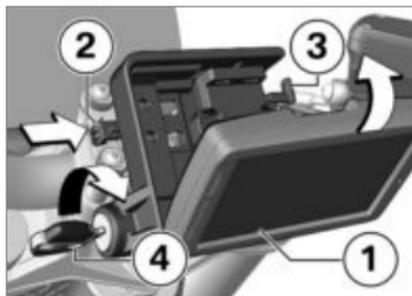
- with preparation for navigation system^{OE}
- with navigation system^{OA}

 The navigation preparation is suitable as from the BMW Motorrad Navigator IV.

 The locking system of the Mount Cradle offers no protection against theft. Remove the navigation system and store in a safe place after every drive.



- Turn the ignition key **1** counterclockwise.
 - Pull the shut-off lock **2** to the **left**.
 - Press in the locking mechanism **3**.
- » The Mount Cradle is unlocked and the cover **4** can be removed with a rotational movement toward the front.



- Mount the navigation system **1** in the lower area and swing backward with a rotational movement.
- » Navigation system audibly engages.
- Slide the shut-off lock **2** completely to the **right**.

- » The locking mechanism **3** is locked.
- Turn the ignition key **4** clockwise.
- » Navigation system is locked and ignition key can be removed.

Remove navigation system and install cover

- with preparation for navigation system^{OE}
- with navigation system^{OA}

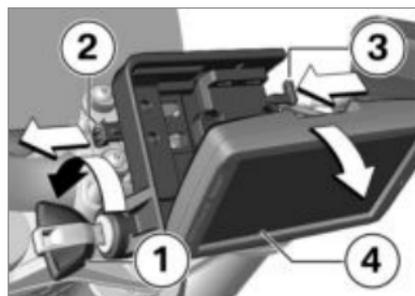


ATTENTION

Dust and dirt on the contacts of the Mount Cradle

Damage to the contacts

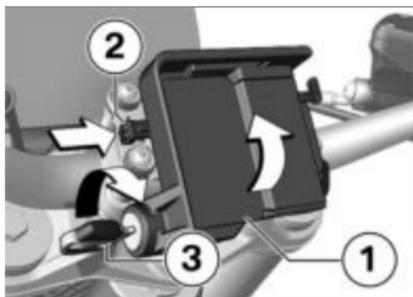
- Reinstall the cover after end of each drive.



- Turn the ignition key **1** counterclockwise.
 - Pull the shut-off lock **2** completely to the **left**.
- » The locking mechanism **3** is unlocked.

202 ACCESSORIES

- Slide the locking mechanism **3** completely to the **left**.
» The navigation system **4** will be unlocked.
- Remove the navigation system **4** downward with a tilting movement.



- Mount the cover **1** in the lower area and swing upward with a rotational movement.
» Cover audibly engages.
- Slide the shut-off lock **2** to the **right**.
- Turn the ignition key **3** clockwise.
» The cover **1** is secured.

Operating the navigation system

—with preparation for navigation system^{OE}

 The following description refers to the BMW Motorrad Navigator V and the BMW Motorrad Navigator VI. The BMW Motorrad

Navigator IV does not offer all options described.

 Only the latest version of the BMW Motorrad communication system is supported. A software update may be required for the BMW Motorrad communication system. In this case, please contact your authorized BMW Motorrad retailer.

Some of the BMW Motorrad Navigator functions can be operated directly from the handlebars if it is installed and the operating focus is changed to the Navigator (► 89).



The navigation system is operated using the Multi-Controller **1** and the rocker button MENU **2**.

Turning the Multi-Controller 1 up and down

On the compass and Mediaplayer pages: increase or reduce the volume for a BMW Motorrad communication system connected via Bluetooth.

On the BMW special menu: select menu items.

Briefly tilting the Multi-Controller 1 to the left and right

Change between the main pages of the Navigator:

- Map view
- Compass
- Mediaplayer
- BMW special menu
- My motorcycle page

Long-tilting the Multi-Controller 1 to the left and right

Activate certain functions on the Navigator display. These functions are marked with a right arrow or a left arrow above the corresponding touch field.



The function is triggered by long actuation to the right.



The function is triggered by long actuation to the left.

Pressing the bottom rocker button MENU 2

Change the operating focus to the Pure Ride view.

In detail, the following functions can be operated:

Map view

- Turning upward: zooms in on map section (Zoom in).
- Turn downward: zooms out of map section (Zoom out).

Compass page

- Turning increases or reduces volume of a BMW Motorrad communication system connected via Bluetooth.

BMW special menu

- Speak: Repeat last navigation announcement.
- Way point: Save current way point as favorite.
- Navigate home: Starts navigation to the home address (is grayed-out if no home address is set).
- Mute: Switch automatic navigation announcements (off: the top line in the display shows a crossed-out lip icon). Navigation announcements can still be output via "Speak".

204 ACCESSORIES

All other sound outputs remain switched on.

- Switching off display: Switch off display.
- Call home: Calls the home phone number stored in the navigator (only displayed when a communication system and a phone are connected).
- Detour: Activates the detour function (only displayed if a route is active).
- Skip: Skips the next way point (only displayed if route is provided with way points).

My Motorcycle

- Turn: Changes the number of data displayed.
- Touching a data field on the display opens a menu for selecting the data.
- The values available for selection are dependent on the optional extras installed.

Medioplayer

- Long actuation to left: Play previous title.
- Long actuation to right: Play next title.
- Turning increases or reduces volume of a BMW Motorrad communication system connected via Bluetooth.

 The Medioplayer function is only available when using a Bluetooth device as per A2DP standard, e.g., a BMW Motorrad communication system.

Warning and status messages

–with navigation system^{OA}



Warning and status displays of the motorcycle are indicated with a corresponding icon **1** at the upper left on the map view.

 If a BMW Motorrad communication system is connected, an acoustic signal is also sounds in case of a warning.

If several warning messages are active, the number of messages is indicated below the warning triangle.

A list of all warning messages is opened by pressing on the warning triangle with more than one message.

Additional information is display when a message is selected.



Detailed information cannot be displayed for all warnings.

Special functions

—with navigation system^{OA}

Due to integration of the BMW Motorrad Navigator, there are differences from the descriptions in the Operating Instructions for the Navigator.

Reserve fuel level warning

The settings for the fuel gauge are not available, as the reserve fuel level warning is being transferred from the vehicle to the Navigator. If the message is active, the nearest filling stations are displayed when the message is pressed.

Time and date display

The Navigator transmits the time and date to the motorcycle. To transfer the time to the TFT display, the GPS synchronization function must also be activated in the Settings, System settings, Date and time menu.

Security settings

The BMW Motorrad Navigator V can be secured against unauthorized use with a four-digit PIN (Garmin Lock). If this function is activated while the Navigator is installed on the motorcycle and the ignition is switched on you will be prompted to add the motorcycle to the list of secured vehicles. If this question is confirmed with "Yes", the Navigator saves the vehicle identification number.

A maximum of five VINs can be saved in this way.

A PIN entry will no longer be required when this Navigator is activated by turning on the ignition switch in any of these vehicles.

Removing the Navigator from the motorcycle while it is switched on will launch a new PIN request as a security measure.

Screen brightness

Screen brightness is adjusted by the motorcycle while the unit is installed. There is no need for manual input. If desired, automatic setting can be switched off in the Navigator via the display settings.

CARE

11

CARE PRODUCTS	208
WASHING YOUR MOTORCYCLE	208
CLEANING SENSITIVE MOTORCYCLE PARTS	209
CARE OF PAINTWORK	210
PAINT PRESERVATION	211
STORE MOTORCYCLE	211
PUTTING THE MOTORCYCLE INTO OPERATION	211

CARE PRODUCTS

BMW Motorrad recommends that you use cleaning and care products available at your authorized BMW Motorrad retailer. BMW Care Products have been materials tested, laboratory tested, and field tested and provide optimum care and protection for the materials used in your vehicle.



ATTENTION

Use of unsuitable cleaning and care agents

Damage to motorcycle parts

- Do not use any solvents such as nitro thinners, cold cleaners, fuel or similar, and do not use cleaning agents that contain alcohol.



ATTENTION

Use of highly acidic or alkaline cleaning agents

Damage to motorcycle parts

- Observe the dilution ratio on the packaging of the cleaning agents.
- Do not use highly acidic or alkaline cleaning agents.

WASHING YOUR MOTORCYCLE

BMW Motorrad recommends that you use BMW Insect Remover to soften and wash off insects and stubborn dirt from painted parts before washing the motorcycle.

To prevent stains, do not wash the vehicle immediately after it has been exposed to bright sunlight and do not wash it in the sun.

Regularly clean the fork tubes of soiling.

Make sure that the motorcycle is washed frequently, especially during the winter months.

To remove road salt, clean the motorcycle with cold water immediately after every trip.



WARNING

Damp brake disks and brake pads after washing the motorcycle, after riding through water or in the rain

Poorer braking action, accident hazard

- Brake early until the brake rotors and brake pads are dry.

**ATTENTION****Increased effect of salt caused by warm water**

Corrosion

- Only use cold water to remove road salt.

**ATTENTION****Damage caused by high water pressure from high-pressure cleaners or steam-jet devices**

Corrosion or short circuit, damage to labels, to seals, to hydraulic brake system, to the electrical system and the seat

- Exercise caution when using high-pressure or steam-jet devices.

CLEANING SENSITIVE MOTORCYCLE PARTS**Plastics****ATTENTION****Use of unsuitable cleaning agents**

Damage to plastic surfaces

- Do not use abrasive cleaners or cleaners containing alcohol or solvents.
- Do not use insect sponges or sponges with a hard surface.

Fairings and panels

Clean trim panel components with water and BMW Motorrad solvent cleaner.

Windshields and lenses are manufactured in plastic

Clean off dirt and insects with a soft sponge and plenty of water.



Soften stubborn dirt and dead insects by covering the affected areas with a wet cloth.



Clean with water and sponge only.

210 CARE

 Do not use chemical cleansers.

TFT display

Clean the TFT display with warm water and detergent. Then dry with a clean cloth, e.g. a paper towel.

Chrome

Carefully clean chrome parts with plenty of water and BMW Motorrad Care Products motorcycle cleaner. This is required in particular for removing road salt. Use BMW Motorrad metal polish for additional treatment.

Radiator

Clean the radiator regularly to prevent overheating of the engine due to inadequate cooling. For example, use a garden hose with low water pressure.



ATTENTION

Bending of radiator fins

Damage to radiator fins

- When cleaning, ensure that the cooler fins are not bent.

Rubber

Treat rubber components with water or BMW rubber care product.



ATTENTION

Use of silicone sprays for care of rubber seals

Damage to rubber seals

- Do not use silicone sprays or care products that contain silicone.

CARE OF PAINTWORK

Washing the motorcycle regularly will help counteract the long-term effects of substances that damage the paint, especially if your motorcycle is ridden in areas with high air pollution or natural sources of dirt, such as tree resin or pollen. However, remove particularly aggressive substances immediately; otherwise changes in the paint or discoloration may occur. These include spilled fuel, oil, grease and brake fluid as well as bird droppings. It is recommended to use BMW Motorrad solvent cleaner and then apply BMW Motorrad high gloss polish to preserve the paint. Contaminants on the paint surface are particularly easy to see

after washing the vehicle. Remove this type of dirt immediately with cleaning benzene or ethyl alcohol on a clean cloth or cotton ball. BMW Motorrad recommends removing tar stains with BMW tar remover. Then add a protective wax coating to the paint at these locations.

PAINT PRESERVATION

Apply a preservative when water fails to bead up on the painted surface.

BMW Motorrad recommends BMW Motorrad high gloss polish or agents that contain carnauba or synthetic wax for paint preservation.

STORE MOTORCYCLE

- Clean motorcycle.
- Completely fill the motorcycle's fuel tank and add fuel additive where appropriate. BMW Motorrad recommends the use of ADVANTEC Protect Original BMW Fuel Additive to protect the fuel from aging.
- Removing battery (➡ 185).

- Spray the brake and clutch lever, and the center and side stand pivots with a suitable lubricant.
- Protect metal and chrome-plated parts with an acid-free grease (Vaseline).
- Store the motorcycle in a dry room, raising it to remove the weight from both front wheels (preferably using the front and rear-wheel stands offered by BMW Motorrad).

PUTTING THE MOTORCYCLE INTO OPERATION

- Remove the protective wax coating.
- Clean the motorcycle.
- Install battery (➡ 186).
- Observe checklist (➡ 121).

TECHNICAL DATA

12

TROUBLESHOOTING CHART	214
THREADED FASTENERS	216
FUEL	218
ENGINE OIL	219
ENGINE	219
CLUTCH	220
TRANSMISSION	220
REAR-WHEEL DRIVE	220
FRAME	221
SUSPENSION	221
BRAKES	221
WHEELS AND TIRES	222
ELECTRICAL SYSTEM	223
ANTI-THEFT ALARM SYSTEM	224
DIMENSIONS	224
WEIGHTS	225
PERFORMANCE DATA	225

214 TECHNICAL DATA

TROUBLESHOOTING CHART

Engine does not start.

Possible cause	Remedy
Side stand extended and gear engaged	Fold in side stand.
Gear engaged and clutch not operated	Place transmission in neutral or disengage clutch.
No fuel in tank	Refueling procedure (▣▣▣ 131).
Battery drained	Charge connected battery (▣▣▣ 184).
Overheating protection for starter motor has activated. Starter motor can only be actuated for a limited period.	Leave the starter motor to cool down for around 1 minute until it becomes available again.

Bluetooth connection is not established.

Possible cause	Remedy
Necessary pairing steps were not performed.	Refer to the operating instructions of the communication system for the necessary steps for pairing.
The communication system is not connected automatically despite successful pairing.	Switch off the communication system of the helmet and connect again after one to two minutes.
Too many Bluetooth devices are stored in the helmet.	Delete all pairing entries in the helmet (see the operating instructions of the communication system).
There are additional vehicles with Bluetooth-capable devices nearby.	Avoid simultaneous pairing with multiple vehicles.

Bluetooth connection is disrupted.

Possible cause	Remedy
Bluetooth connection to the mobile end device is interrupted.	Switch off energy saving mode.
Bluetooth connection to the helmet is interrupted.	Switch off the communication system of the helmet and connect again after one to two minutes.
Volume in the helmet cannot be adjusted.	Switch off the communication system of the helmet and connect again after one to two minutes.

Phone book is not displayed in the TFT display.

Possible cause	Remedy
Phone book was has not yet been transferred to the vehicle.	Confirm the transfer of telephone data (📞 105) during pairing with the mobile device.

Active route guidance is not displayed in the TFT display.

Possible cause	Remedy
Navigation from the BMW Motorrad Connected App was not transferred.	Call up the BMW Motorrad Connected App on the connected mobile end device before riding.
Route guidance cannot be started.	Ensure that there is a data connection to the mobile end device and check the map data on the mobile end device.

216 TECHNICAL DATA

THREADED FASTENERS

Front wheel	Value	Valid
Brake caliper on telescopic forks		
M10 x 65	28 lb/ft (38 Nm)	
Quick-release axle in telescopic fork		
M20 x 1.5	37 lb/ft (50 Nm)	
Clamping screw for quick-release axle in telescopic fork		
M8 x 50	Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time 14 lb/ft (19 Nm)	
Rear wheel	Value	Valid
Tighten rear wheel on wheel flange		
M10 x 1.25 x 40	Tightening sequence: Tighten crosswise 44 lb/ft (60 Nm)	
Gearshift lever	Value	Valid
Foot piece to gearshift lever		
M6 x 20 micro-encapsulated	7 lb/ft (10 Nm)	

Footbrake lever	Value	Valid
Foot piece on footbrake lever		
M6 x 20 micro-encapsulated	7 lb/ft (10 Nm)	

Footrests	Value	Valid
Clamping block on footrest hinge		
M8 x 25	15 lb/ft (20 Nm)	
Footrest on clamping block		
M6 x 20 / M6 x 12	7 lb/ft (10 Nm)	

Handlebars	Value	Valid
Handlebar bridge on fork bridge		
M8 x 35	14 lb/ft (19 Nm)	
M8 x 30	14 lb/ft (19 Nm)	-with preparation for navigation system ^{OE}

218 TECHNICAL DATA

FUEL

Recommended fuel quality	Super unleaded (max 15% ethanol, E0/E5/E10/E15) 89 AKI (95 ROZ/RON) 90 AKI
Alternative fuel quality	Regular unleaded (restrictions with regard to power and fuel consumption.) (max 15% ethanol, E0/E5/E10/E15) 87 AKI (91 ROZ/RON) 87 AKI
Fuel level	Approx. 4.8 gal (Approx. 18 l)
Fuel reserve	Approx. 1.1 gal (Approx. 4 l)
Fuel consumption	50 mpg (4.75 l/100 km), according to WMTC
CO2 emissions	110 g/km, according to WMTC
Emission standard	EU5
	TIER 2, measured in accordance with FTP75

ENGINE OIL

Engine oil, capacity	max 1.1 gal (max 4 l), with filter replacement
Specification	SAE 5W-40, API SL/JASO MA2, Additives (for instance, molybdenum-based substances) are prohibited, because they would attack the coatings on engine components, BMW Motorrad recommends BMW Motorrad ADVANTEC Ultimate oil.
Engine oil, quantity for topping up	max 0.8 quarts (max 0.8 l), Difference between MIN and MAX

BMW recommends **ADVANTEC**
ORIGINAL BMW ENGINE OIL

ENGINE

Engine number location	Lower right of engine block beneath the starter
Engine type	A74B12M
Engine design	Air-cooled/liquid-cooled two-cylinder four-stroke opposed-twin engine with two overhead, spur-gear-driven camshafts, a counterbalance shaft, and variable intake camshaft control BMW Shift-Cam
Displacement	1254 cc (1254 cm ³)
Cylinder bore	4 in (102.5 mm)
Piston stroke	3 in (76 mm)

220 TECHNICAL DATA

Compression ratio	12.5:1
Nominal capacity	134 hp (100 kW), at engine speed: 7750 min ⁻¹
Torque	105 lb/ft (143 Nm), at engine speed: 6250 min ⁻¹
Maximum engine speed	max 9000 min ⁻¹
Idle speed	1050 min ⁻¹ , Engine at operating temperature

CLUTCH

Clutch design	Multi-disk oil-bath clutch, slipper clutch
---------------	--

TRANSMISSION

Transmission design	6-speed transmission with helical cut dog ring gears
Transmission gear ratios	1.650 (33 : 20), Primary gear ratio 2.438 (39 : 16), 1st gear 1.714 (36 : 21), 2nd gear 1.296 (35 : 27), 3rd gear 1.059 (36 : 34), 4th gear 0.943 (33 : 35), 5th gear 0.848 (28 : 33), 6th gear 1.061 (35 : 33), Transmission output ratio

REAR-WHEEL DRIVE

Type of final drive	Shaft drive with bevel gears
Type of rear-wheel guide	Cast-aluminum single swing arm with BMW Motorrad Paralever
Gear ratio of rear-wheel drive	2.818 (31/11 teeth)
Rear axle differential oil	SAE 70W-80 / hypoid axle G3

FRAME

Frame design	Steel-tube frame with partially self-supporting drive unit, steel-tube rear frame
Location of type plate	Frame at front left on steering head
Location of the vehicle identification number	Frame at front right on steering head

SUSPENSION**Front wheel**

Type of front suspension	Upside-down telescopic forks
Spring travel, front	5.5 in (140 mm), on front wheel

Rear wheel

Design of rear-wheel suspension	Central spring strut with coil spring, adjustable rebound-stage damping and spring preload
-with Dynamic ESA ^{OE}	ESA-2 with spring rate adjustment
Spring travel on the rear wheel	5.5 in (140 mm)

BRAKES**Front wheel**

Type of front wheel brake	Hydraulically operated twin disk brake with 4-piston radial calipers and floating brake disks
Front brake pad material	Sintered metal

222 TECHNICAL DATA

Rear wheel

Type of rear wheel brake	Hydraulically operated disk brake with 2-piston floating caliper and fixed brake disk
Rear brake pad material	Sintered metal

WHEELS AND TIRES

Recommended tire combinations	An overview of the current tire approvals is available from your authorized BMW Motorrad retailer or on the Internet at bmw-motorrad.com .
-------------------------------	--

Speed category of front/rear tires	W, minimum requirement: 168 mph (270 km/h)
------------------------------------	--

Front wheel

Front wheel design	Aluminum cast wheel
Front-wheel rim size	3.5" x 17"
Front tire designation	120/70 - ZR 17
Load index for front tire	At least 58
Permissible front wheel load	max 397 lbs (max 180 kg)
Permissible front-wheel imbalance	max 0.2 oz (max 5 g)

Rear wheel

Rear wheel design	Aluminum cast wheel
Rear-wheel rim size	5.5" x 17"
Rear tire designation	180/55 - ZR 17
Load index for rear tire	At least 73
Permissible rear wheel load	max 716 lbs (max 325 kg)
Permissible rear-wheel imbalance	max 1.6 oz (max 45 g)

Tire inflation pressures

Front tire pressure	36.3 psi (2.5 bar), One-up, with cold tires 36.3 psi (2.5 bar), Two-up mode with load, with cold tires 36.3 psi (2.5 bar), Sporting use
Rear tire pressure	42.1 psi (2.9 bar), One-up, with cold tires 42.1 psi (2.9 bar), Two-up mode with load, with cold tires 42.1 psi (2.9 bar), Sporting use

ELECTRICAL SYSTEM

Electrical rating of onboard sockets	max 5 A, all onboard sockets together
Fuse carrier 1	10 A, Slot 1: instrument cluster, anti-theft alarm system (DWA), ignition lock, main relay and diagnostic socket 7.5 A, Slot 2: left multifunction switch, Tire Pressure Control (TCP/RDC), yaw rate sensor
Fuse carrier	50 A, Fuse 1: Voltage regulator

Battery

Battery design	AGM (Absorptive Glass Mat) battery
Battery voltage	12 V
Battery capacity	12 Ah

Spark plugs

Spark plugs, manufacturer and designation	NGK LMAR8AI-10
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224 TECHNICAL DATA

Light sources

Bulb for high-beam headlight	LED
Bulbs for low-beam headlight	LED
Bulb for parking light	LED
Bulb for taillight/brake light	LED
Bulbs for flashing turn indicators	RY10W / 12 V / 10 W

ANTI-THEFT ALARM SYSTEM

Activation time	Approx. 30 s
Alarm duration	Approx. 26 s
Battery type	CR 123 A

DIMENSIONS

Motorcycle length	86.7 in (2202 mm), over license-plate carrier
Motorcycle height	49.4...52.8 in (1255...1340 mm), measured nominal: above windshield, at DIN unladen weight
Motorcycle width	36.4 in (925 mm), with mirrors 39.3 in (999 mm), with cases
Front-seat height	32.3 in (820 mm), without driver at DIN unladen weight
-with rider's seat, low ^{OE}	29.9 in (760 mm), without driver at DIN unladen weight
-with seat Sport ^{OE}	33.1 in (840 mm), without driver at DIN unladen weight

Rider's inside-leg arc, heel to heel	72.4 in (1840 mm), without rider at unladen weight
-with rider's seat, low ^{OE}	67.7 in (1720 mm), without rider at unladen weight
-with seat Sport ^{OE}	73.8 in (1875 mm), without rider at unladen weight

WEIGHTS

Unloaded vehicle weight	536 lbs (243 kg), DIN unladen weight, ready for road, 90 % full tank of gas, without OE
Gross vehicle weight	1014 lbs (460 kg)
Maximum payload	478 lbs (217 kg)

PERFORMANCE DATA

Maximum speed	>124 mph (>200 km/h)
-with touring case ^{OA}	112 mph (180 km/h)
-with topcase ^{OA}	112 mph (180 km/h)

SERVICE

13

REPORTING SAFETY DEFECTS	228
BMW MOTORRAD SERVICE	229
BMW MOTORRAD ELECTRONIC SERVICE HISTORY (ESH)	229
BMW MOTORRAD MOBILITY SERVICES	230
MAINTENANCE PROCEDURES	230
BMW SERVICE	230
MAINTENANCE SCHEDULE	232
MAINTENANCE CONFIRMATIONS	233
SERVICE CONFIRMATIONS	247

REPORTING SAFETY DEFECTS

If you think that your motorcycle has a fault which may cause an accident, injury or death, you must inform the NHTSA (National Highway Traffic Safety Administration) immediately and BMW of North America, LLC.

If the NHTSA receives other similar complaints, it may open an investigation. If it finds that a safety defect exists in a group of vehicles, the NHTSA may order the manufacturer to perform a recall and remedy campaign. However, the NHTSA cannot become involved in individual problems between you, your authorized BMW Motorrad retailer, or BMW of North America, LLC. You can contact the NHTSA by calling the Vehicle Safety Hotline on 1-888-327-4236 (Teletypewriter TTY for the hearing impaired: 1-800-424-9153) for free, by visiting the website at [http:// www.safercar.gov](http://www.safercar.gov) or by writing to Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. Further information on vehicle safety is available at [http:// www.safercar.gov](http://www.safercar.gov). Canadian customers who wish to report a safetyrelated defect to Transport Canada, Defect Investigations and Recalls, may call the toll-free hotline 1-800-333-0510. You can also obtain other information about motor vehicle safety from [http:// www.tc.gc.ca/roadsafety](http://www.tc.gc.ca/roadsafety).

BMW MOTORRAD SERVICE

With its worldwide retailer network, BMW Motorrad can attend to you and your motorcycle in over 100 countries around the globe. Authorized BMW Motorrad retailers have the technical information and expertise needed to conduct reliable service and repairs covering every aspect of your BMW.

You will find the nearest authorized BMW Motorrad retailer to you at our website:
bmw-motorrad.com



WARNING

Improperly performed maintenance and repair work

Accident hazard caused by subsequent damage

- BMW Motorrad recommends having corresponding work on the motorcycle carried out by a specialized workshop, preferably by an authorized BMW Motorrad retailer.

To ensure that your BMW consistently remains in optimal condition BMW Motorrad urges you to observe the recommended service intervals.

Have all maintenance and repair work confirmed in the "Service" chapter in this manual. Documentation confirming regular maintenance is essential for generous treatment of claims submitted after the warranty period has expired (good-will).

You can obtain information on the contents of the BMW Services from your BMW Motorrad retailer.

BMW MOTORRAD ELECTRONIC SERVICE HISTORY (ESH)

Entries

Maintenance work that has been performed is recorded in the diagnostics and information system. Like a Service Booklet, these entries provide proof of regular maintenance.

If an entry is made in the vehicle's eSH, service-related data is stored on the central IT systems of BMW AG in Munich, Germany.

When there is a change in vehicle owner, the data entered in the eSH can also be viewed by the new vehicle owner. A BMW Motorrad retailer or specialist workshop can view the

230 SERVICE

data entered in the electronic Service Manual.

Objection

At the BMW Motorrad retailer or specialist workshop, the vehicle owner can object to the entry of data in the electronic Service Manual with the related storage of data in the vehicle and the transfer of data to the vehicle manufacturer during his time as the vehicle owner. In this case, no entry is made in the vehicle's electronic Service Manual.

BMW MOTORRAD MOBILITY SERVICES

The BMW Motorrad Mobility Services furnish you and your new BMW motorcycle with extra security by offering a wide array of assistance services in the event of a breakdown (BMW Roadside Assistance, breakdown assistance, vehicle recovery and retrieval, etc.). Contact your authorized BMW Motorrad retailer for additional information on available mobility-maintenance services.

MAINTENANCE PROCEDURES

BMW pre-delivery check

The BMW pre-delivery check is carried out by your authorized BMW Motorrad retailer before it turns the motorcycle over to you.

BMW Running-in check



Carrying out the running-in check

311...746 miles
(500...1200 km)

BMW SERVICE

BMW Service is carried out once a year. The scope of the services performed may be dependent on the motorcycle owner and the mileage driven. Your BMW Motorrad retailer confirms that the service has been performed and enters the date for the next service. For riders who drive long distances annually, it may be necessary to come in for service before the entered date. In this case a corresponding maximum odometer reading will also be entered in the confirmation of service. If this odometer reading is reached before the next service date,

service must be performed sooner.

The service interval indicator in the display reminds you of the next service date approx. one month or 620 miles (1000 km) before the entered values.

More information on the topic of service is available at:

bmw-motorrad.com/service

The required scope of maintenance work for your vehicle can be found in the following maintenance schedule:

232 SERVICE

MAINTENANCE SCHEDULE

	50 000 km 300 000 miles	10 000 km 60 000 miles	20 000 km 120 000 miles	30 000 km 180 000 miles	40 000 km 240 000 miles	50 000 km 300 000 miles	60 000 km 360 000 miles	70 000 km 420 000 miles	80 000 km 480 000 miles	90 000 km 540 000 miles	100 000 km 600 000 miles	12 months	24 months
①	X												
②												X	
③		X	X	X	X	X	X	X	X	X	X	X ^a	
④			X		X		X		X		X		X ^b
⑤			X		X		X		X		X		
⑥			X		X		X		X		X		
⑦			X		X		X		X		X		
⑧				X			X			X			
⑨												X ^c	X ^c

- 1 BMW Running-in check (including oil change)
- 2 BMW Service Standard Scope
- 3 Engine oil change with filter
- 4 Oil change in the rear bevel gears
- 5 Check valve clearance
- 6 Replace all spark plugs
- 7 Replace air cleaner insert
- 8 Telescopic fork oil change
- 9 Change brake fluid in entire system

^a annually or every 6000 miles (10000 km) (whichever comes first)

^b annually or every 12000 miles (20000 km) (whichever comes first)

^c for the first time after one year, then every two years

MAINTENANCE CONFIRMATIONS

BMW Service standard scope

The repair procedures belonging to the BMW Service standard package are listed below. The actual maintenance work applicable for your vehicle may differ.

- Performing the vehicle test using the BMW Motorrad diagnostic system
- Visual inspection of the clutch system
- Visual inspection of the brake lines, brake hoses, and connections
- Checking the front brake pads and brake discs for wear
- Checking the front wheel brake fluid level
- Checking the rear brake pads and brake disc for wear
- Checking the rear wheel brake fluid level
- Checking coolant level
- Check side stand for ease of movement
- Checking center stand for ease of movement
- Checking the tire pressure and tread depth
- Check the tension of the spokes and tighten as needed
- Checking the lighting and signal system
- Functional check for engine starting suppression
- Final inspection and road safety check
- Set the service date and remaining distance using the BMW Motorrad diagnostic system
- Checking charging state of battery
- Confirm the BMW service in the vehicle literature

234 SERVICE

BMW pre-delivery check
performed

on _____

Stamp, signature

BMW Running-in Check
performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Stamp, signature

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

236 SERVICE

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

238 SERVICE

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

240 SERVICE

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

242 SERVICE

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
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Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

244 SERVICE

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

246 SERVICE

BMW Service

performed

on _____

Odometer reading _____

Next service

latest

on _____

or, if reached earlier

Odometer reading _____

Work performed

	Yes	No
BMW Service	<input type="checkbox"/>	<input type="checkbox"/>
Engine oil change with filter	<input type="checkbox"/>	<input type="checkbox"/>
Oil change in rear bevel gears	<input type="checkbox"/>	<input type="checkbox"/>
Checking valve clearance	<input type="checkbox"/>	<input type="checkbox"/>
Replacing all spark plugs	<input type="checkbox"/>	<input type="checkbox"/>
Replacing air cleaner element	<input type="checkbox"/>	<input type="checkbox"/>
Checking or replacing air cleaner element (maintenance)	<input type="checkbox"/>	<input type="checkbox"/>
Changing brake fluid in entire system	<input type="checkbox"/>	<input type="checkbox"/>

Information

Stamp, signature

CERTIFICATE FOR ELECTRONIC IMMOBILIZER	251
CERTIFICATE FOR KEYLESS RIDE	253
CERTIFICATE FOR TIRE PRESSURE CONTROL	257
CERTIFICATE FOR TFT INSTRUMENT CLUSTER	258

FCC Approval

Ring aerial in the ignition switch



To verify the authorization of the ignition key, the electronic immobilizer exchanges information with the ignition key via the ring aerial.

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

Approbation de la FCC

Antenne annulaire présente dans le commutateur d'allumage



Pour vérifier l'autorisation de la clé de contact, le système d'immobilisation électronique échange des informations avec la clé de contact via l'antenne annulaire.

Le présent dispositif est conforme à la partie 15 des règles de la FCC. Son utilisation est soumise aux deux conditions suivantes :

- (1) Le dispositif ne doit pas produire d'interférences nuisibles, et
- (2) le dispositif doit pouvoir accepter toutes les interférences extérieures, y compris celles qui pourraient provoquer une activation inopportune.



Toute modification qui n'aurait qui n'aurait pas été approuvée expressément par l'organisme responsable de l'homologation peut annuler l'autorisation accordée à l'utilisateur pour utiliser le dispositif. ◀

Certifications

BMW Keyless Ride ID Device



USA, Canada:

Product name: BMW Keyless Ride ID
Device FCC ID: YGOHUF5750
IC: 4008C-HUF5750



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

Canada:

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.

USA:

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.

Argentina:

CNC COMISIÓN NACIONAL
DE COMUNICACIONES

H-17115

Declaration Of Conformity

We declare under our responsibility that the product

BMW Keyless Ride ID Device (Model: HUF5750)

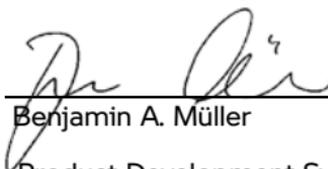
complies with the appropriate essential requirements of the article 3 of the R&TIE and the other relevant provisions, when used for its intended purpose. Applied Standards:

1. Health and safety requirements contained in article 3 (1) a)
 - EN 60950-1:2006+A11:2009+A1:2010+A12:2011; Information technology equipment-Safety
2. Protection requirements with respect to electromagnetic compatibility article 3 (1) b)
 - EN 301 489-1 (V1 .9.2, 09/2011), Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
 - EN 301 489-3 (V1.4.1, 08/2002) Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for short range devices (SRD) operating on frequencies between 9 kHz and 40 GHz
3. Means of the efficient use of the radio frequency spectrum article 3 (2)
 - EN 300 220-1 & -2 (V2.4.1, 05/2012), electromagnetic compatibility and radio spectrum matters (ERM); Short range devices (SRD); Radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW; Part 1: Technical characteristics and test methods. Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TIE directive

The product is labeled with the CE marking:

CE

Velbert, October 15th, 2013



Benjamin A. Müller

Product Development Systems
Car Access and Immobilization -
Electronics Huf Hülsbeck & Fürst
GmbH & Co. KG
Steeger Straße 17, D-42551
Velbert

Certification Tire Pressure Control (TPC)

FCC ID: MRXBC54MA4
IC: 2546A-BC54MA4

FCC ID: MRXBC5A4
IC: 2546A-BC5A4

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s).

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.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

Declaration of Conformity

Radio equipment TFT instrument cluster

For all Countries without EU

Technical information

BT operating frq. Range:

2402 – 2480 MHz

BT version: 4.2 (no BTLE)

BT output power: < 4 dBm

WLAN operating frq. Range:

2412 – 2462 MHz

WLAN standards:

IEEE 802.11 b/g/n

WLAN output power: < 20 dBm

Manufacturer and Address

Manufacturer:

Robert Bosch Car Multimedia GmbH

Address: Robert Bosch Str. 200,
31139 Hildesheim, GERMANY

Turkey

Robert Bosch Car Multimedia

GmbH, ICC6.5in tipi telsiz

sisteminin 2014/53/EU

nolu yönetmeliğe uygun olduğunu

beyan eder. AB Uygunluk

Beyanı'nın tam metni, aşağıdaki

internet adresinden görülebilir:

[http://cert.bosch-](http://cert.bosch-carmultimedia.net)

[carmultimedia.net](http://cert.bosch-carmultimedia.net)

Brazil

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Canada

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Korea

적합성평가에 관한 고시
R-CMM-RBR-ICC65IN
상호 : Robert Bosch Car
Multimedia GmbH모델명 :
ICC6.5in
기자재명칭 : 특정소출력 무선기
기
(무선데이터통신시스템용 무선기
기)
제조사 및 제조국가 : Robert
Bosch Car Multimedia GmbH /
포르투갈
제조년월 : 제조년월로 표기
이 기기는 업무용 환경에서 사용
할 목적으로 적합성평가를 받은
기기로서 가정용 환경에
서 사용하는 경우 전파간섭의 우
려가 있습니
다.

Mexico

La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Taiwan, Republic of

根據 NCC 低功率電波輻射性電機
管理辦法 規定: 第十二條
經型式認證合格之低功率射頻電
機, 非經許可, 公司、商號或使用
者均不得擅自變更頻率、加大功率
或變更原設計之特性及功能。
第十四條
低功率射頻電機之使用不得影響飛
航安全及干擾合法通信; 經發現有
干擾現象時, 應立即停用, 並改善
至無干擾時方得繼續使用。
前項合法通信,
指依電信法規定作業之無線電通
信。
低功率射頻電機須忍受合法通信或
工業、科學及醫療用電波輻射性電
機設備之干擾。

Thailand

เครื่องโทรคมนาคมและอุปกรณ์ นี้

มีความสอดคล้องตามข้อกำหนดของ กทช.

(This telecommunication equipments is in compliance with NTC requirements)

United States (USA)

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

262 INDEX

- A**
- Abbreviations and symbols, 4
- ABS
 - Displays, 44
 - Self-diagnosis, 122, 123
 - Technology in detail, 140
- Accessories
 - General instructions, 194
- Air filter
 - Position in motorcycle, 15
- Ambient temperature
 - Outside temperature warning, 32
- Anti-theft alarm system
 - Indicator light, 19, 36
 - Operation, 76
- ASC
 - Indicator and warning light, 45
 - Operating element, 17
 - Operation, 63
 - Self-diagnosis, 124
 - Technology in detail, 143
- B**
- Battery
 - Charge connected battery, 184
 - Charging disconnected battery, 184
 - Indicator light for vehicle voltage, 33, 34
 - Installing, 186
 - Maintenance instructions, 183
 - Removing, 185
 - Technical data, 223
- Bluetooth, 94
 - Pairing, 94
- Brake fluid
 - Checking the fluid level at rear, 167
 - Checking the front fluid level, 166
 - Front reservoir, 15
 - Rear reservoir, 15
- Brake lever
 - Adjusting the brake lever, 111
- Brake pads
 - Breaking in, 125
 - Check front, 164
 - Check rear, 165
- Brakes
 - ABS Pro in detail, 143
 - ABS Pro dependent on riding mode, 128
 - Adjusting footbrake lever, 112
 - Adjusting handlebar lever, 111
 - Checking function, 164
 - Checking operation, 164
 - Safety instructions, 127
 - Technical Data, 221
- Break-in, 124
- C**
- Care
 - Chrome, 210
 - Paint preservation, 211
- Case, 195
- Chassis
 - Technical Data, 221
- Check Control
 - Dialog, 25
 - Display, 25
- Checklist, 121
- Clock
 - Adjusting, 93

- Clutch
 - Adjusting clutch, 109
 - Adjusting handlebar lever, 109
 - Checking operation, 168
 - Technical Data, 220
- Coolant
 - Check fill level, 168
 - Indicator light for excess temperature, 37
 - Topping up, 169
- D**
- Damping
 - Adjusting, 115
 - Rear adjuster, 14
- Deceleration, 100
- Diagnostic socket
 - fasten, 189
 - Loosen, 189
- Dimensions
 - Technical Data, 224
- Drive malfunction warning light, 38
- DTC, 100
 - Indicator and warning light , 45
 - Operation, 63
 - Technology in detail, 143
- DWA
 - Technical Data, 224
- Dynamic Brake Control, 149
 - Technology in detail, 149
- Dynamic engine brake control, 145
- E**
- Electrical system
 - Technical Data, 223

- Emergency-off switch, 18
 - Operating, 60
- Engine, 38
 - Drive malfunction warning light, 38
 - Indicator light for engine control, 39
 - Starting, 121
 - Technical Data, 219
 - Warning light for electronic engine management, 38
- Engine oil
 - Checking fill level, 162
 - Electronic oil-level check, 36
 - Filling location, 15
 - Fluid level indicator, 15
 - Indicator light for engine oil level, 36
 - Technical Data, 219
 - Topping up, 163
- Equipment, 5
- ESA
 - Operating element, 17
 - Operation, 64
- F**
- Fall sensor
 - Indicator light, 43
- Frame
 - Technical Data, 221
- Front wheel stand
 - Installing, 159
- Fuel
 - Filling location, 14
 - Fuel specifications, 130
 - Refueling, 131, 132
 - refueling with Keyless Ride, 133

264 INDEX

- Technical Data, 218
- Fuel filler cap emergency release, 134, 135
- Fuel reserve
- Indicator light, 48
- Range, 92
- Fuses
- Replacing, 187
- Technical Data, 223

- G**
- Gearshift assistant, 125
- Gear not trained, 49
- Riding, 125
- Technology in detail, 151

- H**
- Hazard warning flasher
- Operating element, 17, 18
- Operation, 62
- Headlight
- Headlight range, 109
- Headlight range adjustment, 14
- Headlight courtesy delay feature, 54, 61
- Heated grips
- Operating element, 18
- Operation, 79
- Hill Start Control, 73, 153
- cannot be activated, 48
- Indicator and warning lights, 48
- Operation, 73
- Technology in detail, 153
- Turn on and off, 74

- Hill Start Control Pro
- Adjusting, 75
- Operation, 74
- Technology in detail, 153
- Horn, 17

- I**
- Ignition
- Switching off, 55
- Switching on, 54
- Immobilizer, 58
- Spare key, 55
- Indicator lights, 19, 38
- ABS, 44
- Anti-theft alarm system, 36
- ASC, 45
- Coolant temperature, 37
- Display, 25
- Drive malfunction warning light, 38
- DTC, 45
- Electronic engine management, 38
- Engine management system, 39
- Engine oil level, 36
- Fall sensor, 43
- Fuel reserve, 48
- Gear not trained, 49
- Hill Start Control, 48
- Light source defect, 34
- My Vehicle, 97
- Outside temperature warning, 32
- Overview, 22
- TPM Tire Pressure Monitor, 41
- Vehicle voltage, 33, 34

- Instrument cluster
 - Ambient light sensor, 19
 - Overview, 19

J

- Jump-starting, 182

K

- Keyless Ride
 - EWS Electronic immobilizer, 58
 - If radio-operated key is lost, 58
 - Locking the steering lock, 56
 - Switch off ignition, 57
 - Switching on ignition, 57
 - Unlocking fuel filler cap, 132, 133
 - Warning indicator, 32, 33

- Keys, 54, 56

L

- Lean angle, 100
- Light sources
 - Replace additional LED headlight, 181
 - Replace LED headlights, 181
 - Replacing LED tail light, 181
 - Technical data, 224
 - Turn indicators, 180
 - Warning indicator for defective bulb, 34
- Lights
 - Headlight courtesy delay feature, 61
 - Low-beam headlight, 60
 - Operate additional high-beam headlight, 61
 - Operating element, 17

- Operating headlight flasher, 60
- Operating high-beam headlight, 60
- Parking lights, 60, 61

- Lowered suspension
 - Limitations, 118
- Luggage
 - Loading information, 118

M

- Maintenance
 - Maintenance schedule, 232
- Maintenance confirmations, 233
- Maintenance intervals, 230
- Media
 - Operation, 104
- Menu
 - Calling up, 88
- Mirrors
 - Adjusting, 108
- Mobility Services, 230
- Motorcycle
 - Care, 206
 - Cleaning, 206
 - Lashing, 135
 - Parking, 129
 - Putting into operation, 211
 - Storage, 211
- Muffler
 - Installing the silencer, 178
 - Removing the silencer, 177
- Multifunction switch
 - Overview, left, 17
 - Overview, right, 18

266 INDEX

- N**
 - Navigation
 - Operation, 102
 - Notice concerning current status, 6
- O**
 - Onboard computer, 97
 - Onboard vehicle toolkit
 - Position on the vehicle, 16
 - Standard tool kit, 159
 - Operating focus change, 89
 - Outside temperature
 - Display, 32
 - Overview of warning indicators, 27
 - Overviews, 100
 - Indicator and warning lights, 22
 - Instrument cluster, 19
 - Left side of vehicle, 14
 - Left-side multifunction switch, 17
 - My Vehicle, 97
 - Right side of vehicle, 15
 - Right-hand multifunction switch, 18
 - TFT display, 23, 24
 - Underneath the seat, 16
- P**
 - Pairing, 94
 - Parking light, 61
 - Phone
 - Operation, 104
 - Pre-Ride-Check, 122
 - Pure Ride
 - Overview, 23
- R**
 - RDC
 - Technology in detail, 150
 - Warning lights, 41
 - Rear-wheel drive
 - Technical Data, 220
 - Rear-wheel stand
 - Installing, 161
 - Refueling, 131, 132
 - Fuel specifications, 130
 - with Keyless Ride, 133
 - Remote control
 - Replacing the battery, 59
 - Rider info status line
 - Adjusting, 89, 90
 - Rider's Manual (US Model)
 - Position on the vehicle, 16
 - Riding mode
 - Adjusting, 67
 - Operating element, 18
 - Setting the PRO riding mode, 69
 - Technology in detail, 147
 - Road sign detection
 - Switching on or off, 91
- S**
 - Safety information
 - For riding, 118
 - On braking, 127
 - Seat
 - Height adjustment position, 16
 - Seats
 - Locking mechanism, 14
 - Removing and installing, 80
 - Service, 229
 - Electronic service history, 229
 - Reporting safety defects, 228
 - Service display, 49

- Shift lever
 - Adjusting the foot plate, 110
- ShiftCam, 154
 - Technology in detail, 154
- Shifting flash, 76
 - Adjusting, 76
 - Overview, 125
 - switching on/off, 76
- Shifting gears
 - Shiftpoint light, 126
 - Upshift recommendation, 92
- Socket
 - Information on use, 194
 - Position on motorcycle, 15
- Spark plugs
 - Technical Data, 223
- Speed control
 - Operation, 70
- Speedometer, 19
- Spring preload
 - Adjusting, 114
 - Rear adjuster, 15
- Start, 121
 - Operating element, 18
- Steering lock
 - Locking, 54
- Switching off, 129
- T**
- Tachometer, 19
 - Tachometer, 91
- Technical data
 - Anti-theft alarm system, 224
 - Battery, 223
 - Brakes, 221
 - Clutch, 220
 - Dimensions, 224
 - Electrical system, 223
 - Engine, 219
 - Engine oil, 219
 - Frame, 221
 - Fuel, 218
 - General notes, 5
 - Light sources, 224
 - Rear-wheel drive, 220
 - Spark plugs, 223
 - Standards, 5
 - Suspension, 221
 - Transmission, 220
 - Weights, 225
 - Wheels and tires, 222
- TFT display, 19
 - Operating, 88
 - Operating element, 17
 - Operation, 88, 89
 - Overview, 23, 24
 - Selecting the display, 85
- Tire Pressure Control TPC/RDC Display, 39
- Tires
 - Breaking in, 125
 - Checking tire pressure, 169
 - Checking tire tread depth, 170
 - Checking tread depth, 170
 - Inflation pressure table, 16
 - Inflation pressures, 223
 - Technical Data, 222
- Topcase
 - Operating, 198
- Torques, 216
- Traction Control
 - ASC, 143
 - DTC, 143
- Transmission
 - Technical Data, 220
- Troubleshooting chart, 214

268 INDEX

Turn signals

- Operating element, 17
- Operating element, right, 18
- Operation, 62

Type plate

- Position on motorcycle, 15

V

Values

- Display, 25

Vehicle identification number

- Position on motorcycle, 15

Vehicle voltage

- Indicator light, 33, 34

W

Warning lights, 19

- Overview, 22

Weights

- Payload table, 16
- Technical Data, 225

Wheels

- Check wheel rims, 170
- Checking wheel rims, 170
- Installing front wheel, 173
- Installing rear wheel, 176
- Removing front wheel, 171
- Size change, 171
- Technical Data, 222

Windshield

- Adjusting, 108

The descriptions and illustrations in this manual may vary from your own motorcycle's actual equipment, depending upon its equipment level and accessories as well as your specific national version. No claims will be entertained as a result of such discrepancies. Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances. The right to modify designs, equipment and accessories is reserved. Errors and omissions excepted.

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WARNING

Harmful substances

Operating, servicing and maintaining a passenger vehicle or off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates and lead, which are known to the State of California to be carcinogenic or detrimental to childbirth or reproduction.

- To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle.
- For more information visit: www.P65Warnings.ca.gov/passenger-vehicle

Important data for refueling:

Fuel

Recommended fuel quality	Super unleaded (max 15% ethanol, E0/E5/E10/E15) 89 AKI (95 ROZ/RON) 90 AKI
Alternative fuel quality	Regular unleaded (restrictions with regard to power and fuel consumption.) (max 15% ethanol, E0/E5/E10/E15) 87 AKI (91 ROZ/RON) 87 AKI
Fuel level	Approx. 4.8 gal (Approx. 18 l)
Fuel reserve	Approx. 1.1 gal (Approx. 4 l)

Tire inflation pressures

Front tire pressure	36.3 psi (2.5 bar), One-up, with cold tires 36.3 psi (2.5 bar), Two-up mode with load, with cold tires 36.3 psi (2.5 bar), Sporting use
Rear tire pressure	42.1 psi (2.9 bar), One-up, with cold tires 42.1 psi (2.9 bar), Two-up mode with load, with cold tires 42.1 psi (2.9 bar), Sporting use

You can find further information on all aspects of your vehicle at: bmw-motorrad.com

BMW recommends **ADVANTEC**
ORIGINAL BMW ENGINE OIL

Order No.: 01 40 9 831 767
08.2020, 4th edition, 07



Huomioi seuraavat seikat käyttöohjeen lisäksi.

VAROITUS

Auton avaimessa on nappiparisto. Paristot tai nappiparistot voivat joutua nieluun ja johtaa kahden tunnin sisällä vakaviin tai hengenvaarallisiin vammoihin, esim. sisäisiin palovammoihin tai syöpymävammoihin. Tämä aiheuttaa loukkaantumis- ja hengenvaaran. Säilytä auton avainta ja paristoja lasten ulottumattomissa. Jos epäilet, että paristo tai nappiparisto on nieltä tai se on joutunut kehon sisälle, käänny välittömästi lääkärin puoleen.

HUOMAUTUS

Auton avaimen asetetut epäsoivat paristot voivat vaurioittaa auton avainta. Tämä aiheuttaa aineellisten vahinkojen vaaran. Vaihda tyhjän pariston tilalle vain jännitearvoltaan, kooltaan ja ominaisuuksiltaan vastaava paristo.

Oltre al libretto Uso e manutenzione, osservare quanto segue.

AVVERTENZA

La chiave della vettura contiene come batteria una batteria a bottone. Le batterie o le batterie a bottone possono essere ingerite ed entro due ore causare lesioni gravi o mortali, ad es. dovute a ustioni o corrosioni interne. Sussiste il pericolo di lesioni o conseguenze letali. Tenere la chiave della vettura e le batterie fuori dalla portata dei bambini. Nel dubbio che una batteria o una batteria a bottone sia stata ingerita o si trovi in una parte del corpo, chiedere immediatamente aiuto medico.

AVVISO

Batterie non adatte nella chiave della vettura possono danneggiare la chiave della vettura stessa. Sussiste il pericolo di danni materiali. Sostituire una batteria scarica soltanto con una batteria con la stessa tensione, la stessa dimensione e la stessa specifica.

Vær også oppmerksom på bruksanvisningen.

ADVARSEL

Batteriet i bilnøkkelen er en knappecelle. Batterier eller knappceller kan svelges og forårsake alvorlig personskade eller død innen to timer, f.eks. som følge av indre forbrenninger eller etseskader. Fare for personskader eller livsfare. Oppbevar bilnøkklene og batteriene utilgjengelig for barn. Hvis du mistenker at et batteri eller en knappecelle er svelget eller befinner seg i noen del av kroppen, må du ringe lege straks.

MERKNAD

Feil batterier i bilnøkkelen kan skade bilnøkkelen. Det er fare for materielle skader. Bytt ut utladet batteri kun med et batteri med samme spenning, størrelse og spesifikasjon.

Opřoč instrukcji obsługi przestrzegaj następujących zaleceń.

OSTRZEŻENIE

W kluczu do pojazdu znajduje się bateria guzikowa. Baterie zwykłe i guzikowe mogą zostać połknięte i w przeciągu dwóch godzin doprowadzić do ciężkich lub śmiertelnych obrażeń, np. w wyniku wewnętrznych oparzeń lub oparzeń chemicznych. Istnieje niebezpieczeństwo odniesienia obrażeń oraz zagrożenie dla życia. Klucz do pojazdu i baterie trzymać poza zasięgiem dzieci. W przypadku podejrzenia, że bateria zwykła lub guzikowa została połknięta lub znajduje się w innej części ciała, bezwzględnie udać się po pomoc medyczną.

WSKAZÓWKA

Niewłaściwa bateria może doprowadzić do uszkodzenia klucza do pojazdu. Istnieje niebezpieczeństwo strat materialnych. Rozładowaną baterię należy wymienić na baterię o takim samym napięciu, o tej samej wielkości i z taką samą specyfikacją.

Naast de handleiding ook het volgende in acht nemen.

WAARSCHUWING

De voertuigsluutel heeft een knoopcel als accu. Accu's of knoopcellen kunnen worden ingeslikt en binnen twee uur tot ernstige of dodelijke letsels leiden, bijv. door verbrandingen. Er bestaat kans op letsel of levensgevaar. Voertuigsluutels en accu's buiten het bereik van kinderen bewaren. Onmiddellijk medische hulp inroepen bij een vermoeden dat een accu of knoopcel werd ingeslikt of zich in een lichaamsdeel bevindt.

OPMERKING

Ongeschikte accu's in de voertuigsluutel kunnen de voertuigsluutel beschadigen. Er bestaat gevaar voor schade. De ontladen accu alleen door een accu met dezelfde spanning, dezelfde grootte en dezelfde specificaties vervangen.

Suplimentar față de manualul de utilizare, respectați următoarele.

⚠️ AVERTIZARE

Cheia autovehiculului conține o baterie sub forma unui element tip buton. Bateriile sau elementele tip buton pot fi înghițite și pot produce vătămări grave sau mortale în interval de două ore, de ex. prin provocarea de arsuri interne sau arsuri caustice. Există pericol de vătămare sau chiar pericol de moarte. Păstrați cheia autovehiculului și bateriile în locuri inaccesibile copiilor. Dacă aveți suspiciunea că o baterie sau un element tip buton a fost înghițit sau se află într-o parte a corpului, apălați imediat medicul.

⚠️ INDICAȚIE

Dacă în cheia autovehiculului se află baterii inadecvate, cheia autovehiculului poate suferi deteriorări. Există pericolul daunelor materiale. Înlocuiți bateria descărcată numai cu o baterie de aceeași tensiune, aceeași mărime și specificație identică.

Επιπρόσθετα στο εγχειρίδιο οδηγών προσέξτε τα παρακάτω.

⚠️ ΠΡΟΕΙΔΟΠΟΙΗΣΗ

Το κλειδί οχήματος περιέχει μια κομβίοσχημη μπαταρία. Οι μπαταρίες ή οι κομβίοσχημες μπαταρίες υπάρχουν κίνδυνος να καταποθούν και εντός δύο ωρών να οδηγήσουν σε σοβαρούς ή θανάσιμους τραυματισμούς, π.χ. εξαιτίας εσωτερικών εγκαυμάτων ή χημικών εγκαυμάτων. Υπάρχει κίνδυνος τραυματισμού ή θανάτου. Φυλάτε το κλειδί οχήματος και τις μπαταρίες μακριά από παιδιά. Αν υπάρχει υποψία κατάποσης μιας κομβίοσχημης μπαταρίας ή μιας μπαταρίας ή ότι αυτή βρισκείται μέσα σε κάποιο μέρος του σώματος, αναζητήστε άμεσα ιατρική βοήθεια.

⚠️ Υπόδειξη

Ακατάλληλες μπαταρίες μέσα στο κλειδί οχήματος μπορούν να προκαλέσουν ζημιά στο κλειδί οχήματος. Υπάρχει κίνδυνος υλικών ζημιών. Αντικαθιστάτε την αποφορτισμένη μπαταρία μόνο με μια μπαταρία ίδιας τάσης, ίδιου μεγέθους και ίδιων προδιαγραφών.

Kromě návodu k obsluze věnujte pozornost následujícímu.

⚠️ VAROVÁNÍ

Klíč vozidla obsahuje knoflíkový článěk jako baterii. Baterie nebo knoflíkové články lze spolknout a během dvou hodin může dojít k těžkému nebo smrtelnému zranění, např. v důsledku vnitřních popálenin nebo poleptání. Hrozí nebezpečí poranění nebo smrtelného úrazu. Klíč vozidla a baterie uchovávejte mimo dosah dětí. Při podezření na spolknutí baterie nebo knoflíkového článku nebo na jejich přítomnost v těle ihned zavolejte lékařskou pomoc.

⚠️ UPOZORNĚNÍ

Nevhodné baterie v klíči vozidla mohou klíč vozidla poškodit. Hrozí nebezpečí hmotných škod. Vybítenou baterii vyměňte pouze za baterii se stejným napětím, stejnými rozměry a stejnou specifikací.

Para além do manual do condutor, respeitar o seguinte.

⚠️ ATENÇÃO

Como bateria, a chave do veículo contém uma pilha tipo botão. As baterias ou as pilhas tipo botão podem ser engolidas e, dentro de duas horas, causar ferimentos graves ou até a morte devido a, por ex., queimaduras químicas internas. Existe risco de lesão ou risco de vida. Guardar a chave do veículo fora do alcance das crianças. Se suspeitar que uma bateria ou pilha tipo botão tenha sido engolida ou se encontra numa parte do corpo, entrar imediatamente em contacto com a assistência médica.

⚠️ AVISO

Baterias inadequadas na chave do veículo podem danificar a chave do veículo. Existe perigo de danos materiais. Substituir a bateria descarregada por uma bateria com a mesma tensão, do mesmo tamanho e da mesma especificação.

Beakta även följande om instruktionsboken.

⚠️ VARNING

Fordonsnyckeln innehåller en knappcell som batteri. Batterier eller knappceller kan sväljas och leda till allvarliga eller dödliga skador inom två timmar, t.ex. genom inre brännskador eller frätskador. Risk för personskador eller livsfara. Förvara fordonsnyckeln och batterierna utom räckhåll för barn. Om du misstänker att någon person har svält ett batteri eller en knappcell eller att den finns i en kroppsdelen måste du omedelbart söka medicinsk hjälp.

⚠️ ANVISNING

Olämpliga batterier i fordonsnyckeln kan skada fordonsnyckeln. Risk för materiella skador. Ett urladat batteri får bara bytas ut mot ett batteri med samma spänning, storlek och specifikation.

A kezelési útmutató mellett vegye figyelembe a következőket.

FIGYELMEZTETÉS

A járműkulcs egy gombalemmel működik. Az elemek, illetve a gombalemegek lenyelhetők, és két órán belül súlyos vagy halálos sérüléseket okozhatnak, például belső gyulladások vagy felmaródások okozásával. Sérülésveszély vagy életveszély áll fenn. A járműkulcsot és az elemeket gyermekektől távol kell tartani. Egy elem, illetve egy gombaleme lenyelésének gyanúja esetén, vagy ha az egy testrészbbe kerülne, azonnal kérjen orvosi segítséget.

MEGJEGYZÉS

Csak megfelelő gombalemekekkel használja a járműkulcsot, különben a járműkulcs károsodhat. Anyagi kár veszélye áll fenn. A lemerült elemet csak azonos feszültségű, azonos méretű és azonos jellemzőkkel rendelkező elemmel helyettesítse.

Vær opmærksom på følgende ud over instruktionsbogen.

ADVARSEL

Bilnøglen inderholder et knapbatteri som batteri. Batterier eller knapbatterier kan sluges og i løbet af to timer føre til alvorlige eller dødelige kvæstelser, f.eks. indre forbrændinger eller ætsninger. Der er risiko for kvæstelse eller livsfare. Bilnøgler og batterier skal opbevares utilgængeligt for børn. Hvis der er mistanke om, at et batteri eller et knapbatteri er blevet slugt eller befinder sig i en kropsdel, skal lægen kontaktes omgående.

BEMÆRK

Uegnede batterier i bilnøglen kan beskadige bilnøglen. Der er risiko for materiel skade. Det afladede batteri må kun udskiftes med et batteri med samme spænding, størrelse og specifikationer.

Poleg navodil za uporabo upoštevajte še naslednje.

OPOZORILO

Avtomobilski ključ ima gumbasto celico kot baterijo. V primeru, če pride do zaužitja baterije ali gumbaste celice, lahko to v dveh urah povzroči resne telesne poškodbe ali smrt, npr. zaradi notranjih kemičnih opeklin. Obstaja nevarnost telesnih poškodb ali smrtna nevarnost. Avtomobilski ključ in baterije hranite zunaj dosega otrok. Če obstaja sum, da je prišlo do zaužitja baterije ali gumbaste celice ali da je v katerem koli delu telesa, takoj pokličite zdravniško pomoč.

OPOMBA

Neprimerno baterije v avtomobilskem ključu ga lahko poškodujejo. Obstaja nevarnost materialne škode. Izpraznjeno baterijo lahko zamenjate samo z baterijo enake napetosti, enake velikosti in istih tehničnih specifikacij.

Okrem návod na obsluhu rešpektujte aj nasledujúce pokyny.

VAROVANIE

Kľúč od vozidla obsahuje gombikovú batériu. Hrozí prehltnutie batérie alebo gombikových batérií a v priebehu dvoch hodín vznik vážnych alebo smrteľných poranení, napr. vnútorné popáleniny alebo poleptania. Hrozí nebezpečenstvo zranenia alebo ohrozenia života. Kľúč od vozidla a batérie uchovávajte mimo dosahu detí. Pri podozrení na prehltnutie batérie alebo gombikovej batérie alebo na ich prítomnosť v niektorej časti tela okamžite vyhľadajte lekársku pomoc.

UPOZORNENIE

Nevhodné batérie v kľúči od vozidla ho môžu poškodiť. Hrozí nebezpečenstvo večných škôd. Vybíť batériu nahraďte batériou s rovnakým napätím, rovnakou veľkosťou a rovnakou špecifikáciou.

Please note the following in addition to the information provided in the Owner's Handbook.

⚠ WARNING

The battery inside the vehicle key is a button cell. Batteries or button cells can be swallowed, causing serious or even fatal injuries within two hours, e.g. due to internal burns or cauterisations. There is a danger of injury or danger to life. Keep vehicle keys and batteries out of the reach of children. Seek medical assistance immediately if you suspect that a battery or button cell has been swallowed or has got into a part of the body.

⚠ NOTE

Using unsuitable batteries in a vehicle key can damage the vehicle key. There is a risk of material damage. Discharged batteries should only ever be replaced with batteries of the same voltage, same size and same specification.

Respecter les consignes suivantes en plus de la notice d'utilisation

⚠ AVERTISSEMENT

La clé du véhicule contient une pile bouton. Les batteries ou piles boutons peuvent être avalées et provoquer des blessures graves voire mortelles dans les deux heures, par exemple par des brûlures internes ou des brûlures chimiques. Risque de blessures ou danger de mort. Tenir la clé du véhicule et les batteries hors de la portée des enfants. En cas de suspicion d'ingestion d'une batterie ou d'une pile bouton ou d'introduction dans une partie du corps, contacter immédiatement un médecin.

⚠ REMARQUE

L'insertion de batteries non conformes dans la clé du véhicule peut endommager cette dernière. Risque de dommages matériels. Remplacer la batterie déchargée uniquement par une batterie de tension, de taille et de spécification identiques.

Zusätzlich zur Betriebsanleitung folgendes beachten.

⚠ WARNUNG

Der Fahrzeugschlüssel enthält als Batterie eine Knopfzelle. Batterien oder Knopfzellen können verschluckt werden und innerhalb von zwei Stunden zu schweren oder tödlichen Verletzungen führen, z. B. durch innere Verbrennungen oder Verätzungen. Es besteht Verletzungsgefahr oder Lebensgefahr. Fahrzeugschlüssel und Batterien außerhalb der Reichweite von Kindern aufbewahren. Bei Verdacht, dass eine Batterie oder Knopfzelle verschluckt wurde oder sich in einem Körperteil befindet, sofort medizinische Hilfe rufen.

⚠ HINWEIS

Ungeeignete Batterien im Fahrzeugschlüssel können den Fahrzeugschlüssel beschädigen. Es besteht die Gefahr von Sachschäden. Die entladene Batterie nur durch eine Batterie mit gleicher Spannung, gleicher Größe und gleicher Spezifikation ersetzen.

Observar lo siguiente adicionalmente al manual de instrucciones.

⚠ AVISO

La llave del vehículo contiene una pila de botón a modo de batería. Las pilas o las pilas de botón pueden ser ingeridas y, en el plazo de dos horas, causar lesiones graves o mortales como, p. ej., por quemaduras o abrasiones internas. Existe peligro de lesionarse o peligro de muerte. Mantener la llave del vehículo y las pilas fuera del alcance de los niños. Si sospecha que se ha ingerido una pila o una pila de botón, o que se encuentra en una parte del cuerpo, busque asistencia médica de inmediato.

⚠ INDICACIÓN

Las pilas no adecuadas para la llave del vehículo pueden dañar la misma. Existe peligro de daños materiales. La pila descargada únicamente debe ser sustituida por una pila con la misma tensión, el mismo tamaño y las mismas especificaciones.

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