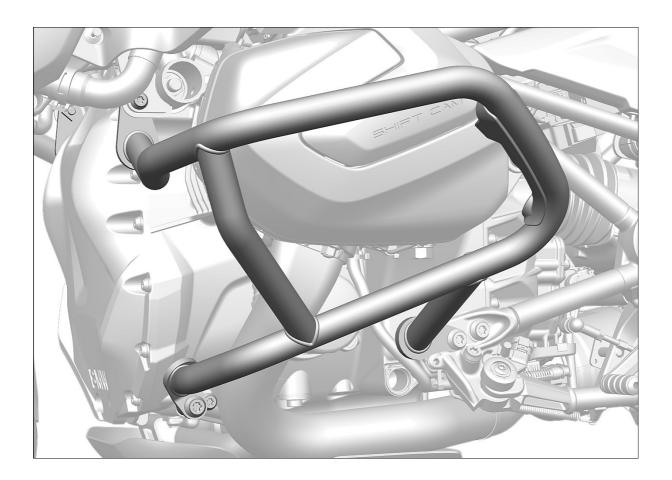
## **BMW Motorrad**

# **Installation instructions**

## **Engine protection bar**



#### Before commencing work, you must read these installation instructions through carefully and make sure you understand them fully.

We congratulate you on your choice of optional accessories from BMW Motorrad that will enable you to customise your motorcycle in accordance with your personal preferences.

Safety is invariably an essential prerequisite for extracting full benefit and enjoyment from new accessories. Some work calls for special tools and possibly a thorough knowledge of motorcycle technology. If you are in doubt consult a specialist workshop, preferably your authorised BMW Motorrad dealer.

Since we provide you with a multitude of accessories and optional equipment, we cannot cover all equipment specifications in these installation instructions. Therefore we restrict ourselves to the basic version of the corresponding model. The removal and installation of other possibly installed accessories is described in the corresponding installation instructions. Consult your authorised BMW Motorrad dealer if you no longer have access to the sets of instructions you need.

If you have questions concerning your motorcycle or any of the accessories from our range, your authorised BMW Motorrad dealer will gladly provide advice and assistance.

We at BMW Motorrad hope you will enjoy riding your BMW and that all your journeys will be pleasant and safe.

#### The symbols used to draw attention to precautionary statements in this manual are as follows:

### ✓!\ CAUTION

### !\ WARNING

### /!\ DANGER

### **ATTENTION**

Low-risk hazard. Nonavoidance can lead to slight or moderate injury. Medium-risk hazard. Non- High-risk hazard. Nonavoidance can lead to fatal avoidance leads to fatal or severe injury.

or severe injury.

Special notes and precautionary measures. Noncompliance can lead to damage to the vehicle or accessory and, consequently, to voiding of the warranty.

### NOTICE

### Tightening torque

Specific instructions on how to operate, control, adjust or look after items of with the applicable DIN/ equipment on the motorcycle.

Screws, bolts and nuts are tightened in accordance ISO standards. Tightening torques that deviate from the standards are stated. Non-compliance can result in damage to the vehicle or accessories or can endanger the driver.

- ► Start of the main activity
- Start of the secondary activity
- Instruction

- End of the main activity
- ☐ End of the secondary activity
- ♦ End of validity designation CS (construction status), OE (optional extra) or OA (optional accessory)

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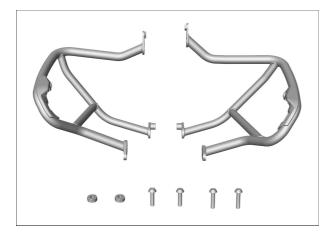
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## **Engine protection bar**

#### **Requisite tools**

- Set of Torx bits
- Torque wrench



#### **Delivery specification**

- Engine protection bar, left
- Engine protection bar, right
- BushCheese head screw, M8 x 302 pieces2 pieces
- Cheese head screw, M10 x 45 MK 2 pieces

#### **General instructions**

### **ATTENTION**

#### Vehicle not securely propped

Risk of damage to parts if vehicle topples

• Prop the vehicle securely.

#### **WARNING**

#### Children and pets in the working area

Injury to persons

• Keep children and pets away from the working area.

#### **A** CAUTION

#### Wearing jewellery during work

Risk of injury by snagging or electrical short circuit

• Remove all items of personal jewellery (rings, chains, wristwatch, etc.) before starting work.

### NOTICE

Once the retrofit kit has been installed by the workshop, these installation instructions must be handed over to the customer.

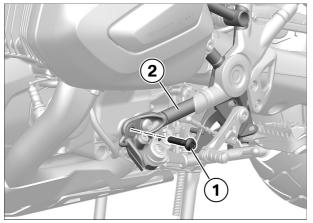
Make sure that these installation instructions accompany the retrofit kit when it is passed on to a third party.

### 77 14 100 Installing crash bars

- with Rallye style OE (0453)
- without two-up riding package<sup>OE</sup> (0413)

Additional work: 46 52 510 Removing and installing the rear-wheel stand special tool (motorcycles without centre stand)

1



#### Remove the screw on left from main frame

• Remove screw (1) from the main frame (2) and lay it safely aside (will be reused).

◀

2

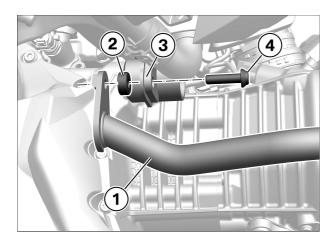
#### ► Positioning left engine protection bar

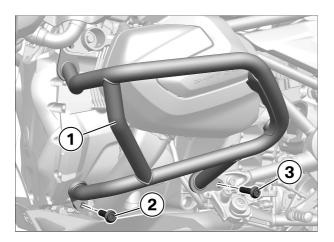
### **ATTENTION**

Use of hard or sharp-edged objects in proximity to component

Component damage

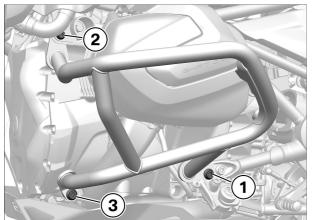
- Take care not to scratch components; cover or mask as necessary.
- Position engine protection bar (1) and bush (2) from the inside on main frame (3).
- Install bolt (4) loosely.





- Position engine protection bar (1) and install screws (2) and (3) hand-tight.
- Only screw (2) has screw locking agent.

3

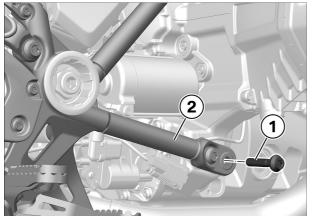


### Securing left engine protection bar

• Tighten screws (1), (2) and (3) in specified sequence.

Tightening torques			
Engine protection bar to frame/engine			
M10 x 45	Tightening sequence: 1. rear bottom with frame to engine		
	55 Nm		
M8 x 30	Tightening sequence: 2. front top to frame		
	19 Nm		
M10 x 45 Thread-locking compound (micro-encapsulated)	Tightening sequence: 3. front bottom to engine		
	56 Nm		

•



#### Removing screw on right from main frame

• Remove screw (1) from the main frame (2) and lay it safely aside (will be reused).

6

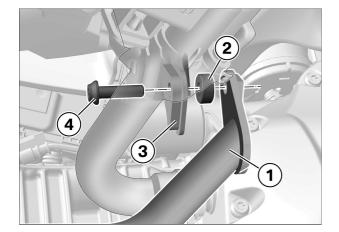
### ► Positioning right engine protection bar

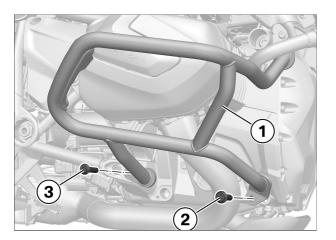
### **ATTENTION**

Use of hard or sharp-edged objects in proximity to component

Component damage

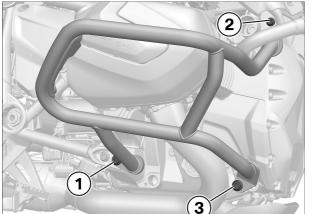
- Take care not to scratch components; cover or mask as necessary.
- Position engine protection bar (1) and bush (2) from the inside on main frame (3).
- Install bolt (4) loosely.





- Hold engine protection bar (1) in position and install bolt (2) and (3) hand-tight.
- Only screw (2) has screw locking agent.

6



### Securing right engine protection bar

• Tighten screws (1), (2) and (3) in specified sequence.

Tightening torques			
Engine protection bar to frame/engine			
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	56 Nm		

7

#### ► Final check of work performed

- Check the following:
- The work as performed achieved the intended purpose.
- All reservoirs and containers have been filled and all fluids and lubricants are at their correct levels.
- All threaded fasteners released beforehand have been correctly retightened.
- The fuel system is free of leaks.
- The lights and signalling equipment are fully operational and the vehicle is roadworthy.

 The brake pads of the front and rear brakes are bedded against the brake discs.

#### **▶** Function test, engine start suppression

#### Check

- Set kill switch to centred position.
- Select neutral.
- Switch on the ignition.
- » Neutral telltale light "N" lights up.
- Select a gear.
- » Neutral indicator light "N" goes out.
- Press the starter button.
- » Starter does **not** operate.
- Extend the side stand.
- Pull the clutch lever.
- Press the starter button.
- » Starter does **not** operate.
- Retract the side stand.
- Press the starter button without releasing the clutch lever.
- » Starter operates.

#### Result

Not all test steps completed successfully.

#### Measure

• Check the appropriate parts with the BMW Motorrad diagnostic system.

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