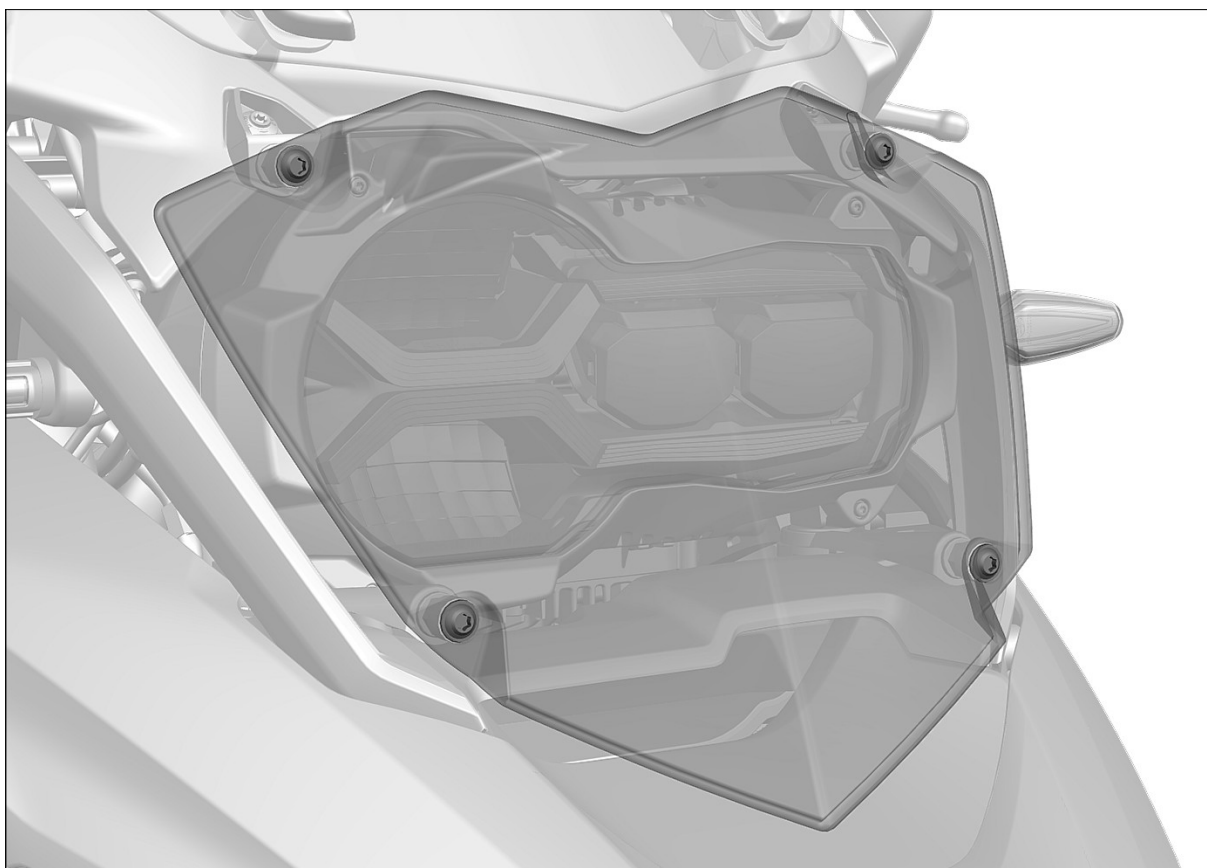


BMW Motorrad

Installation instructions

headlight guard



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

Low-risk hazard. Non-avoidance can lead to slight or moderate injury.

WARNING

Medium-risk hazard. Non-avoidance can lead to fatal or severe injury.

DANGER

High-risk hazard. Non-avoidance leads to fatal or severe injury.

ATTENTION

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

NOTICE

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

Tightening torque

Screws, bolts and nuts are tightened in accordance with the applicable DIN/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.

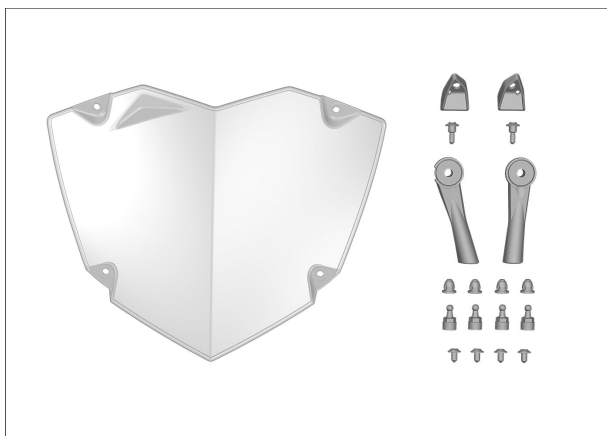
- ▶ Start of the main activity
- ▷ Start of the secondary activity
- Instruction

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

headlight guard

Requisite tools

- Set of Torx bits
- Torque wrench



Delivery specification

- Set, headlight guard

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.

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 51 004 Installing headlight guard

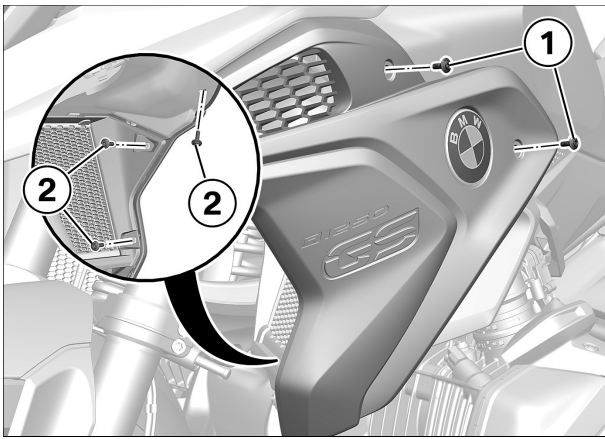
NOTICE

Use the headlight guard only when off-roading. Riding on public roads with the headlight guard fitted to the motorcycle is prohibited.

- with Rallye style^{OE} (0453)
- without two-up riding package^{OE} (0413)

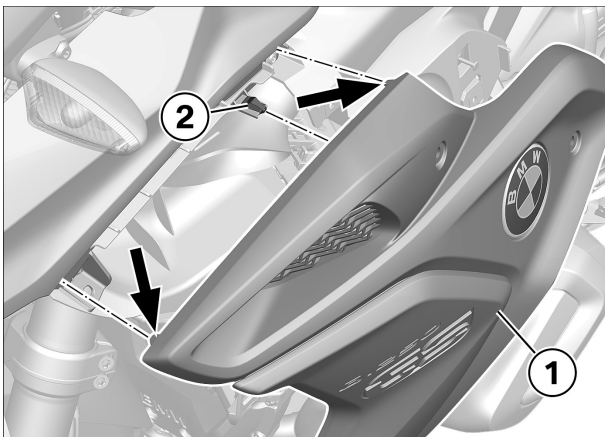
Additional work: 46 52 510 Removing and installing the rear-wheel stand special tool (motorcycles without centre stand)◇

1



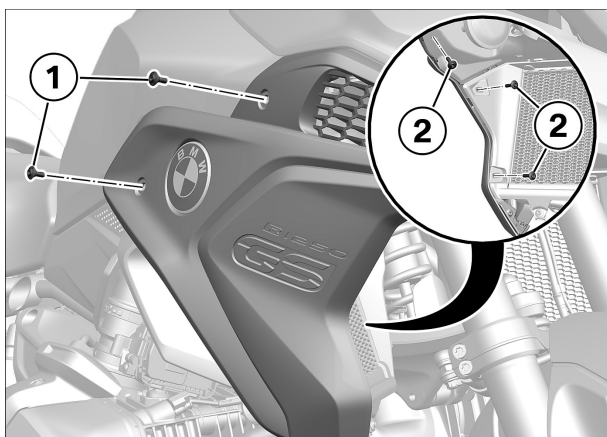
► Removing left side panel

- Remove screws **(1)** and **(2)**.



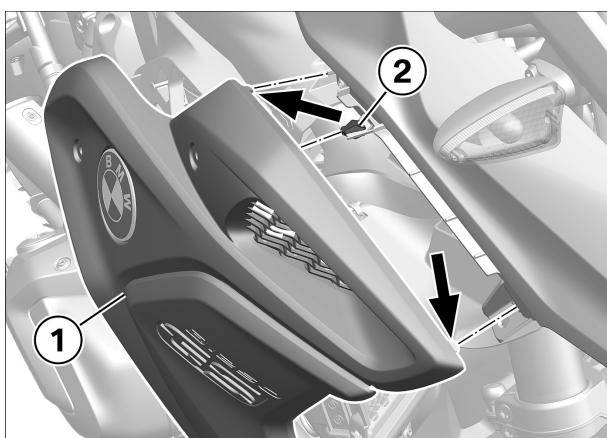
- Remove side section **(1)**, pulling the mounting on clamp **(2)** and paying attention to the lugs (**arrows**) while doing so.

2



► Removing right side panel

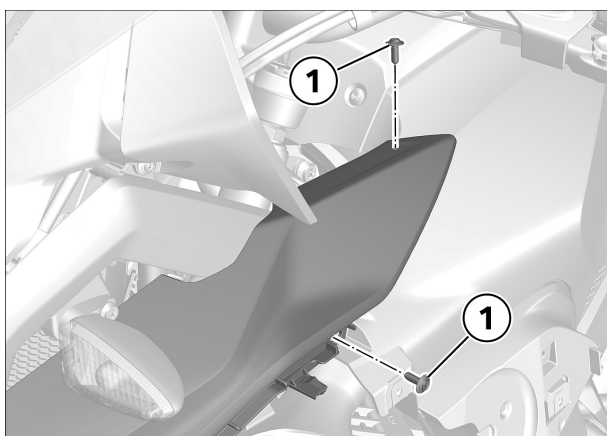
- Remove screws **(1)** and **(2)**.



- Remove side section **(1)**, pulling the mounting on clamp **(2)** and paying attention to the lugs (**arrows**) while doing so.

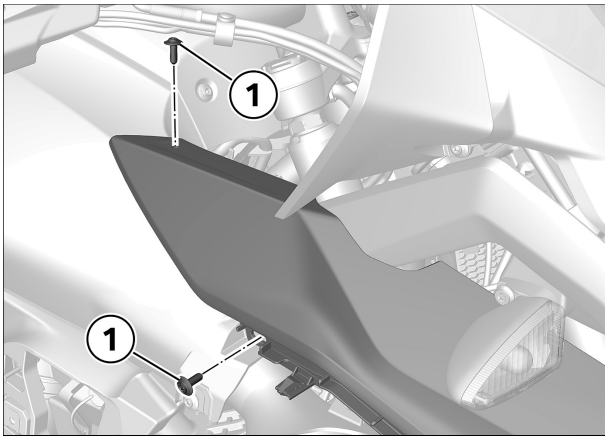


3

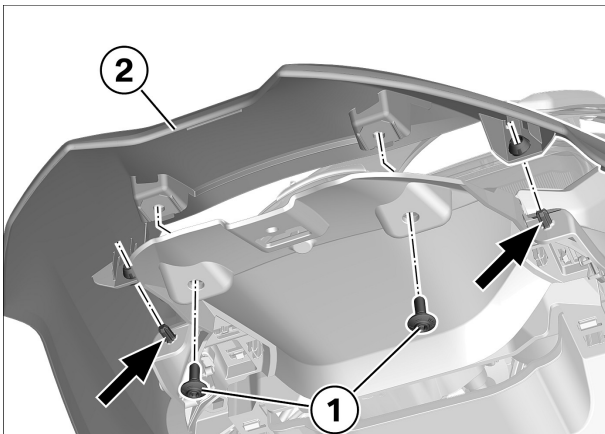


► Removing top front-wheel cover

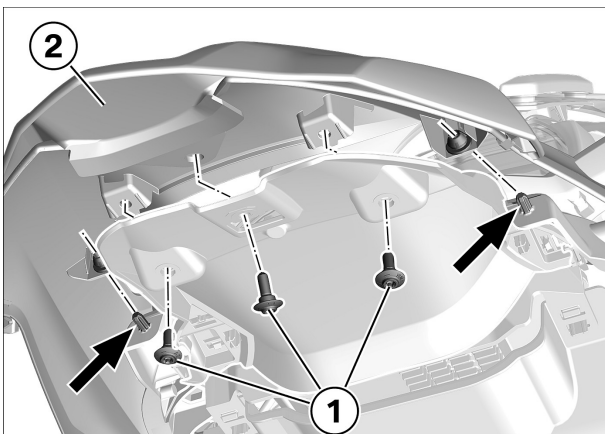
- Remove left screws **(1)**.



- Remove right screws **(1)**.

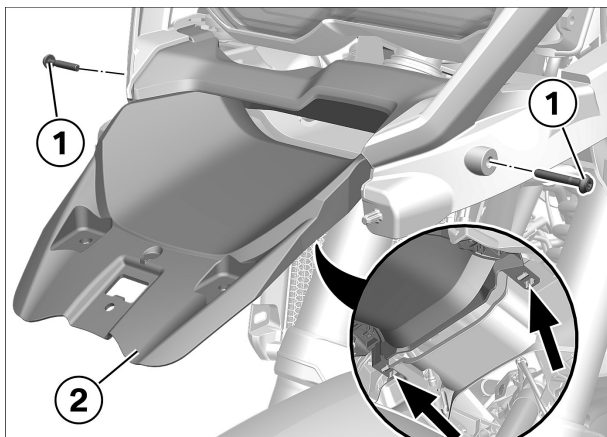


- Remove screws **(1)**.
- Pull off front-wheel cover **(2)** forward from the lugs **(arrows)**.



- with Rallye style^{OE} (0453)
- Remove screws **(1)**.
- Pull off front-wheel cover **(2)** forward from the lugs **(arrows)**.◇

4

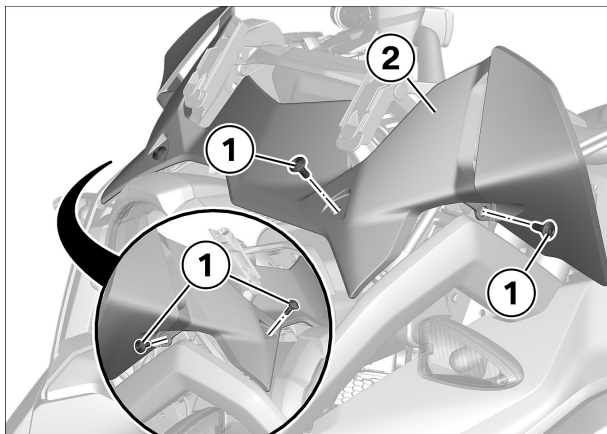


► Remove front-wheel cover, centre

- Remove screws (1).
- Unclip retaining lugs (arrows).
- Remove front-wheel cover, centre (2).



5

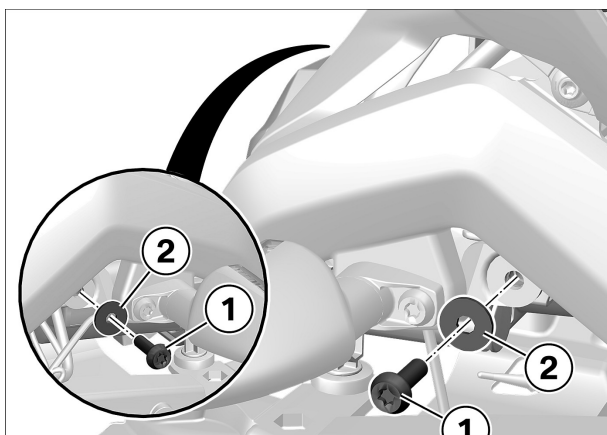


► Removing cockpit fairing

- Remove screws (1).
- Remove cockpit fairing (2).

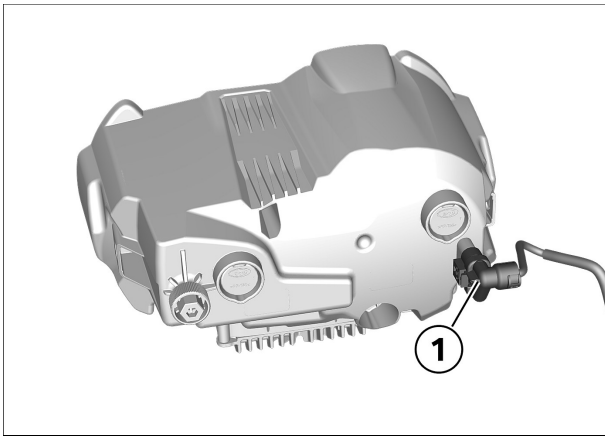


6

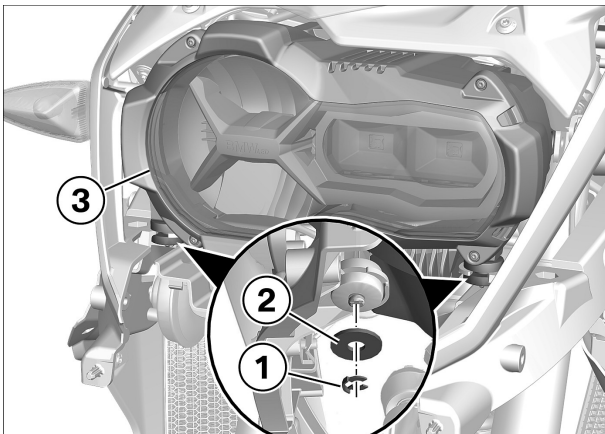


► Removing headlight

- Remove screws (1) and contact discs (2) on both sides.



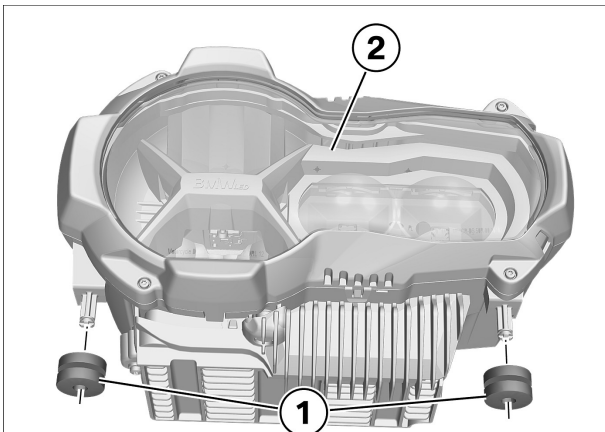
- Disconnect connector **(1)** for the headlight.



- Remove retaining clips **(1)**.
- Remove washers **(2)**.
- Remove headlight **(3)** with rubber grommets to the front.



7

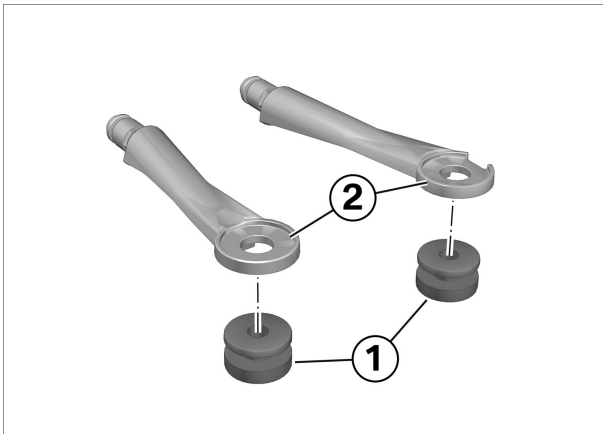


► Removing rubber grommets

- Remove rubber grommets **(1)** from headlight **(2)**.



8



► Installing new rubber grommets in bottom holders

- Lightly lubricate rubber grommets **(1)** and install in bottom holder **(2)**.

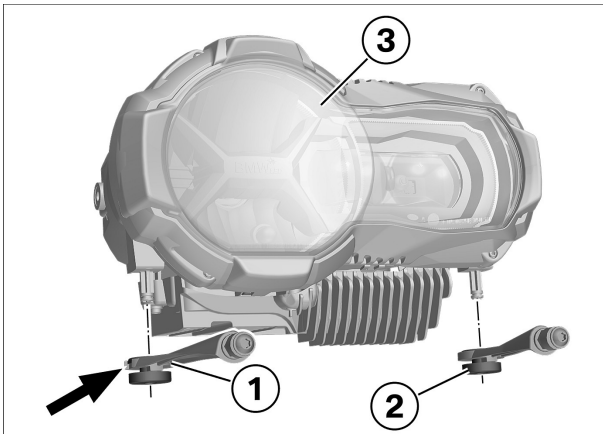


Care products

Rubber care product

83 12 0 397 018

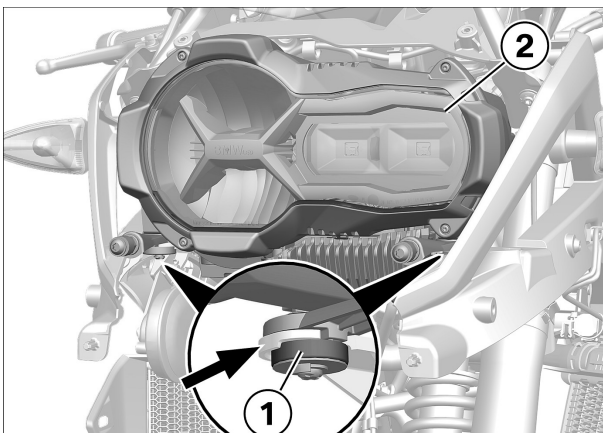
9



► Installing holder

- Install holder **(1)** with recess **(arrow)** and holder **(2)** on headlight **(3)**.

10



► Installing headlight

- Lubricate rubber grommets **(1)** slightly.

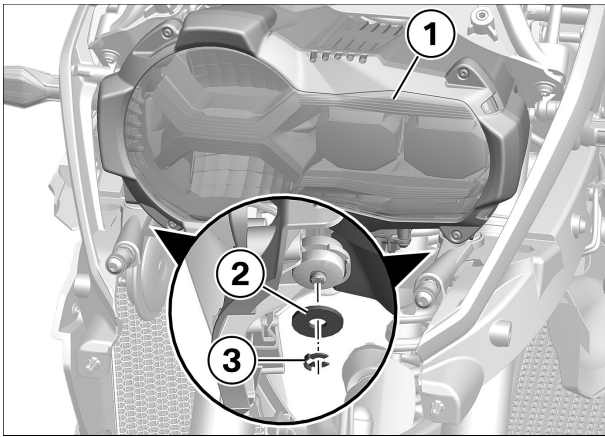


Care products

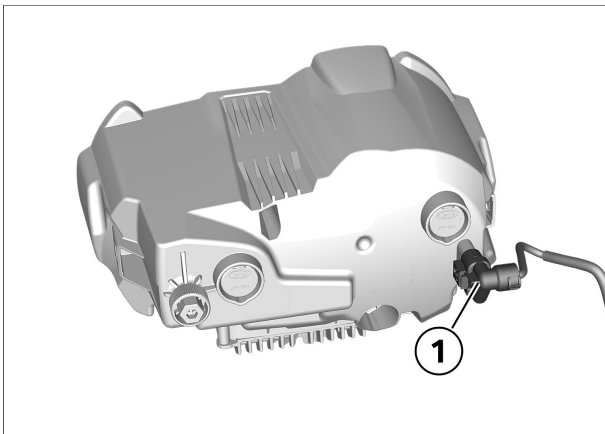
Rubber care product

83 12 0 397 018

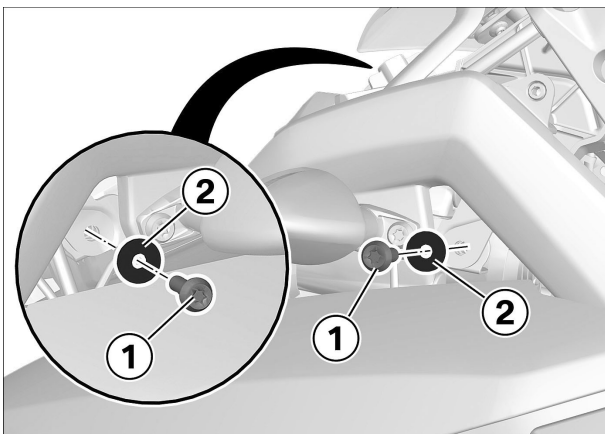
- Install headlight **(2)**.
- Pay attention to the correct seating of rubber grommets **(1)** in holder **(arrow)**.




- Push headlight **(1)** down slightly.
- Install washers **(2)** and retaining clips **(3)**.



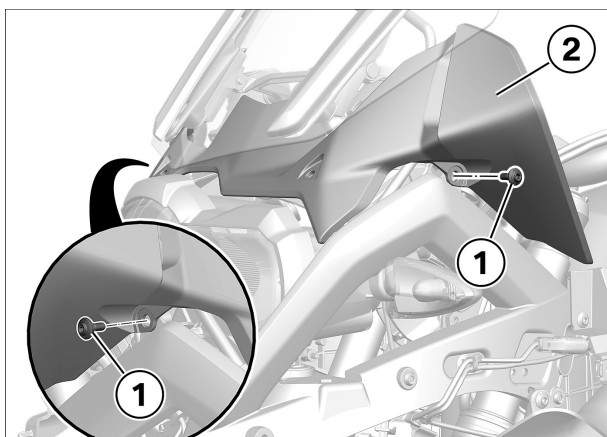
- Connect connector **(1)** for the headlight.



- Install screws **(1)** with washers **(2)**.

 Tightening torques		
Headlight to front panel carrier		
M6 x 20	5 Nm	

11

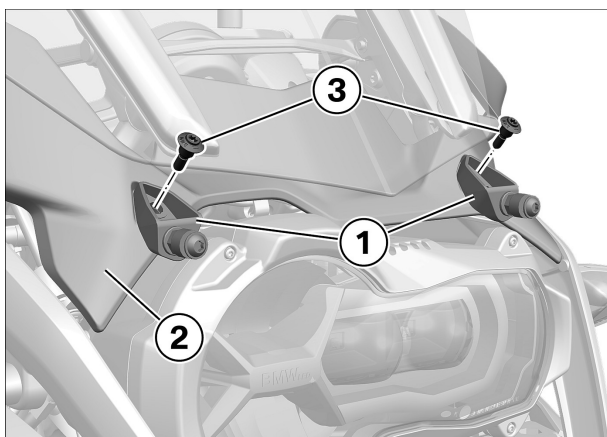


► Install the cockpit fairing

- Hold cockpit fairing **(2)** in position.
- Install screws (short collar) **(1)**.



12

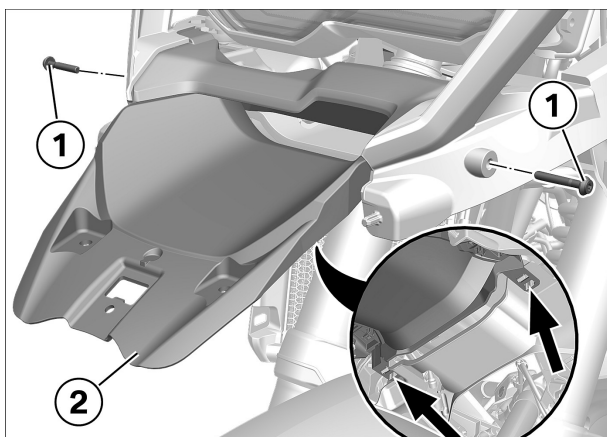


► Installing brackets on cockpit fairing

- Position holder **(1)** on cockpit fairing **(2)**.
- Install screws with collar **(3)** hand-tight.



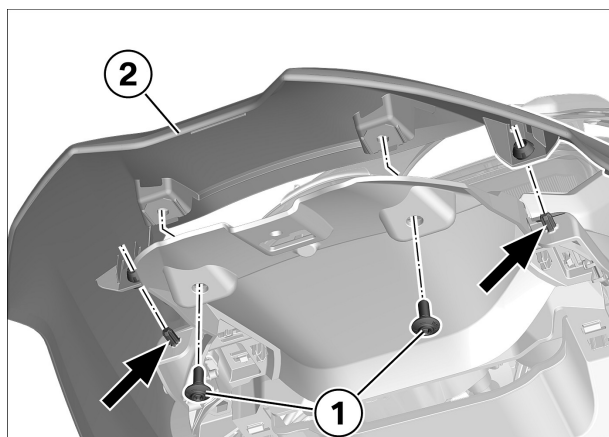
13



► Install front-wheel cover centre

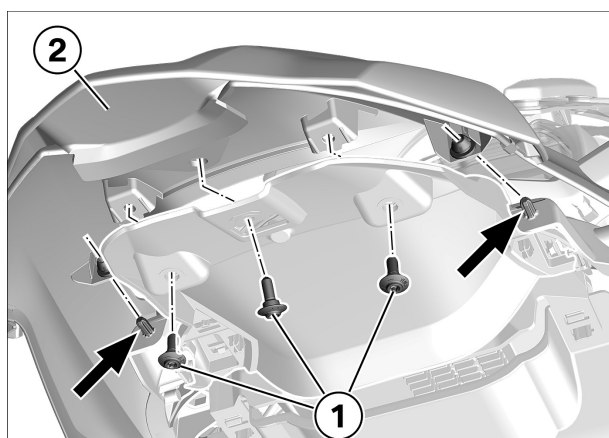
- Insert front-wheel cover, centre **(2)**.
» The retaining lugs (**arrows**) snap into engagement.
- Install screws **(1)**.





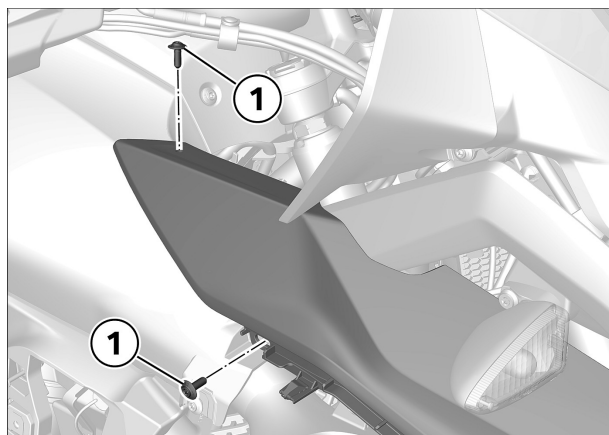
► Installing top front-wheel cover

- Push front-wheel cover **(2)** onto the lugs **(arrows)**.
- Install screws (shorter collar) **(1)**.

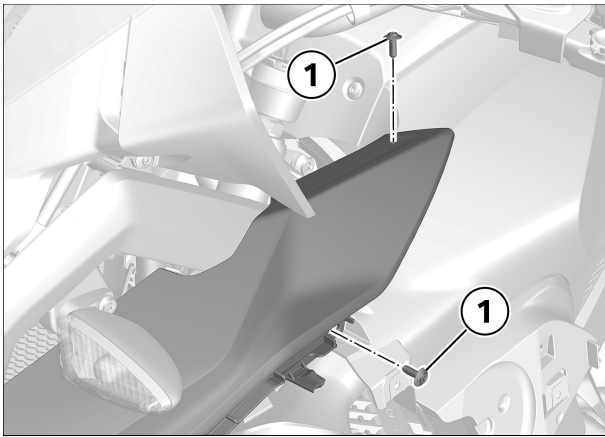


– with Rallye style^{OE} (0453)

- Push front-wheel cover **(2)** onto the lugs **(arrows)**.
- Install screws **(1)**.◇



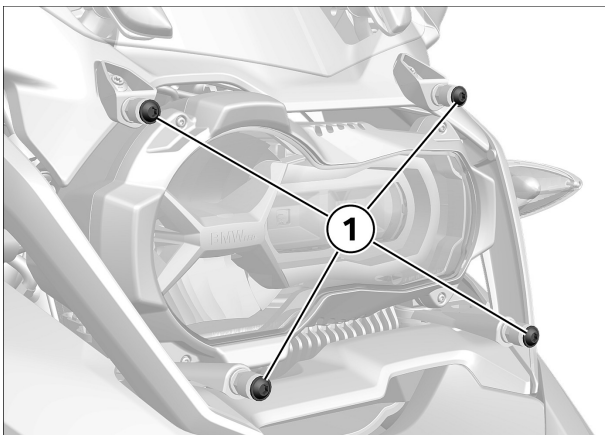
- Install right screws **(1)**.



- Install left screws **(1)**.



15

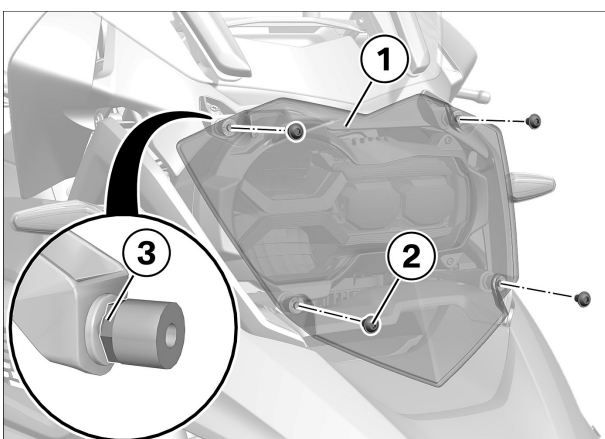


► Removing screws

- Remove screws **(1)**.




16

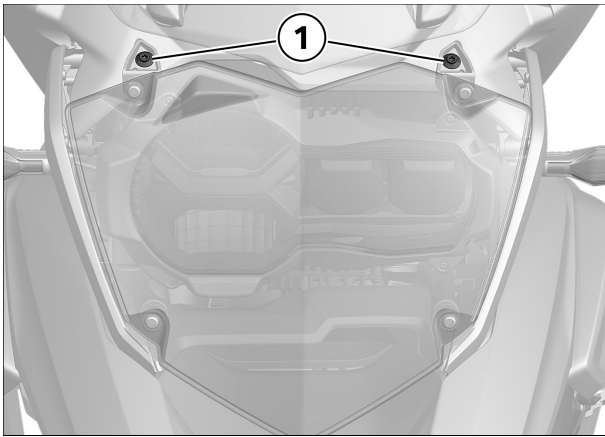


► Installing headlight guard


- Fit headlight guard **(1)**.
- Install screws **(2)**, counter-holding on hexagon head **(3)**.

 Tightening torques		
Spacer studs to headlight guard		
M6 x 10	2.5 Nm	– with headlight guard ^{OA}

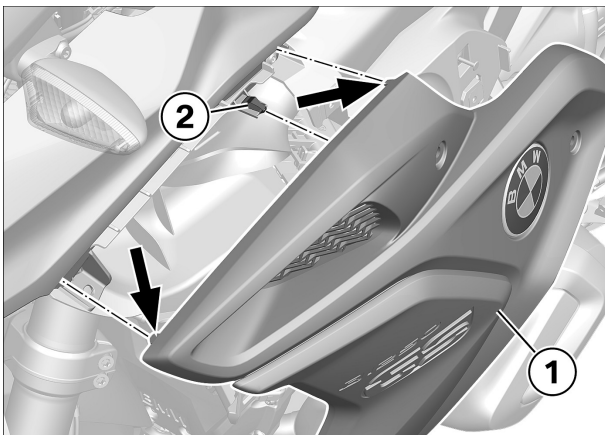
- Centre headlight guard **(1)**.



- Tighten screws **(1)** of holders.

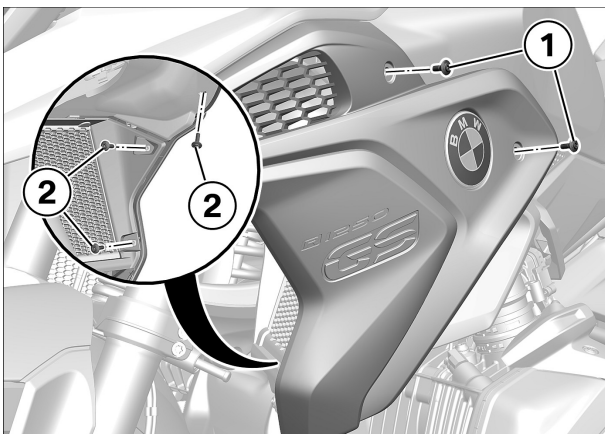
 Tightening torques		
Bracket to cockpit fairing		
M5 x 17.5	2 Nm	– with headlight guard ^{OA}

17

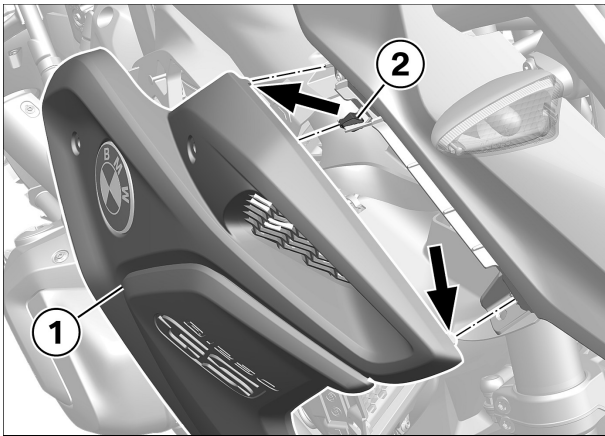


► Installing left side panel

- Install side section **(1)**, pressing the mounting on clamp **(2)** and paying attention to the lugs **(arrows)** while doing so.

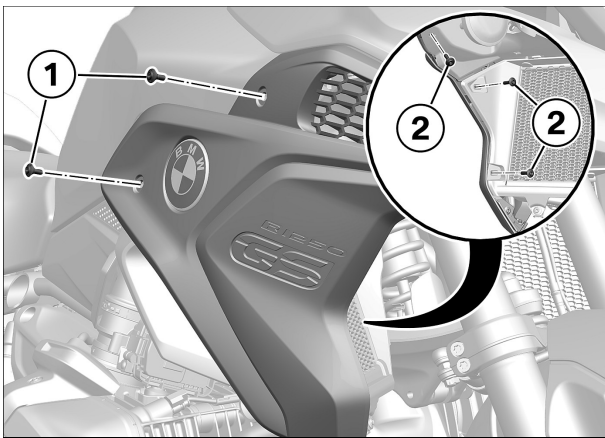


- Install screws (short collar) **(1)** and screws (without collar) **(2)**.



► Installing right side panel

- Install side section **(1)**, pressing the mounting on clamp **(2)** and paying attention to the lugs **(arrows)** while doing so.



- Install screws (short collar) **(1)** and screws (without collar) **(2)**.



► Checking headlight beam throw

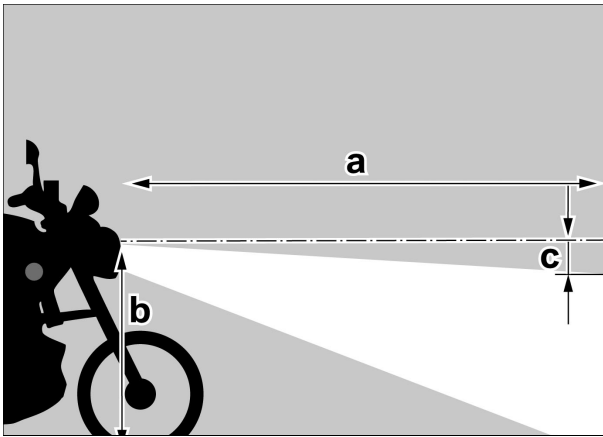
Requirement

Motorcycle standing on a smooth, level surface.

Rider's weight applied to the motorcycle.

- Set the spring preload to the basic setting.
 - with Dynamic ESA^{OE} (0191)
- Set the preload of spring strut to the basic setting (Auto **(1)**).◇






- Start the engine and check that the headlight setting.

Check

- Distances:
 - (a): distance between headlight and vertical surface
 - (b): height of centre of headlight
 - (c): distance to light/dark cut-off

 Technical data			
Distance between headlight and vertical surface For headlight adjustment		10 m	
Distance between light/dark cut-off and mark at height of centre of headlight	Chassis and suspension in the basic setting and vehicle subject to a load of 85 kg	10 cm	

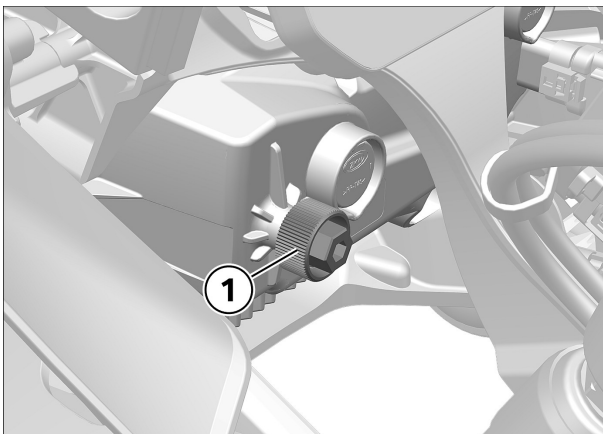
Result

Headlight beam angle not correct.

Measure

▷ Correcting headlight beam angle

- Adjust headlight beam throw by turning adjusting screw **(1)**.



► 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.

