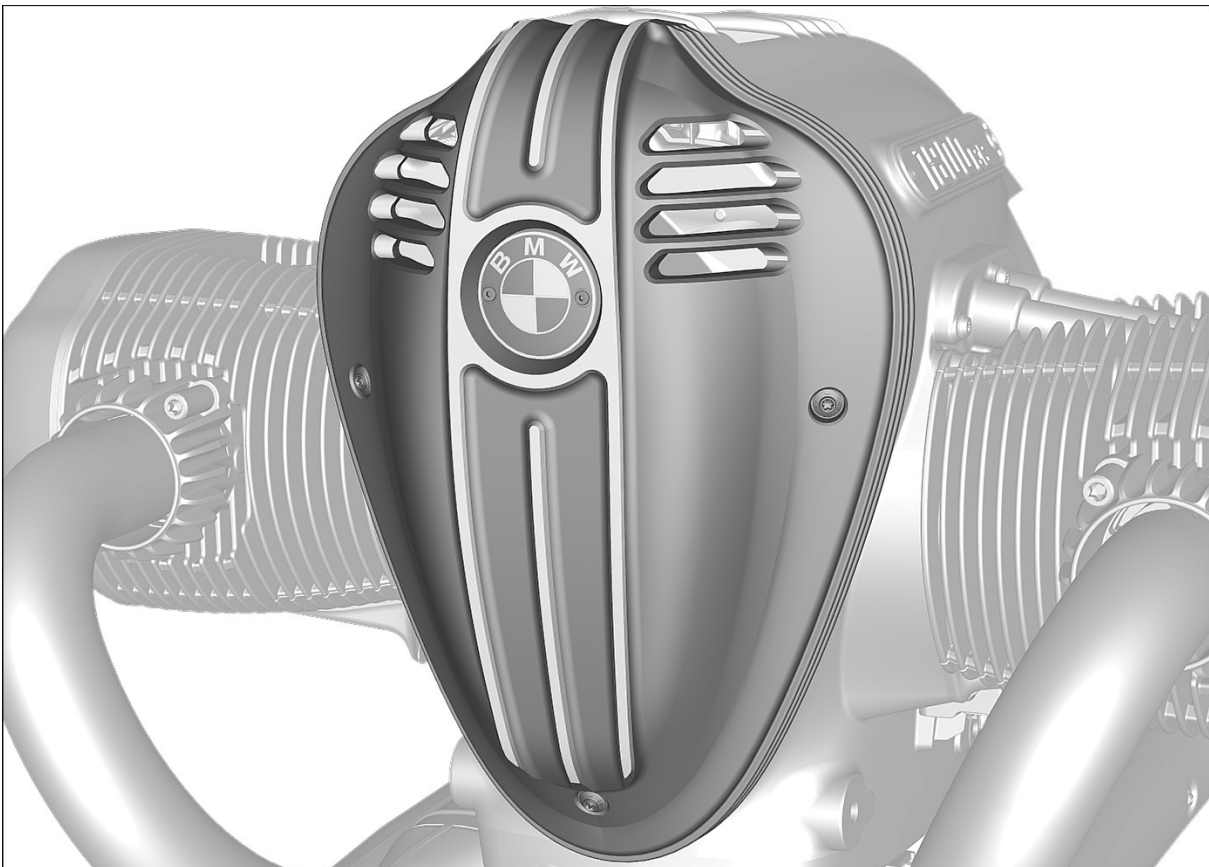


BMW Motorrad

Installation instructions

Engine housing cover



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)

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Engine housing cover

Requisite tools

- Set of hexagon head socket bits
- Set of Torx bits
- Torque wrench
- Extension (00 1 575)
Order No.: 83 30 0 401 348
- Scissor-type lifter (00 1 571)
Order No.: 83 30 0 401 345
- Engine adapter (00 1 592)
Order No.: 83 30 5 A1F D97



Delivery specification

- Engine housing cover

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 12 004 Install the front engine housing cover

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

1

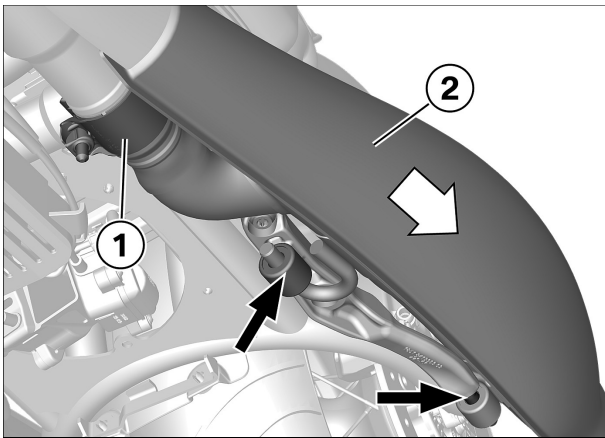
► Removing left silencer

⚠ CAUTION

Hot exhaust system

Risk of burn injury

- Do not touch a hot exhaust system.



- Slacken the clamp (1).

- Detach silencer (2) to the rear from holder (Arrows) and remove.

2

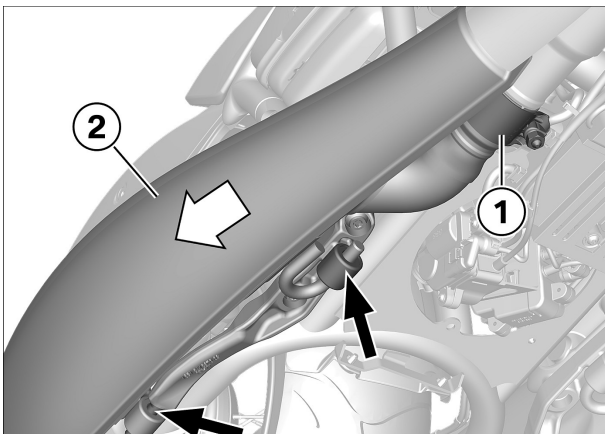
► Removing right silencer

⚠ CAUTION

Hot exhaust system

Risk of burn injury

- Do not touch a hot exhaust system.



- Slacken the clamp (1).

- Detach silencer (2) to the rear from holder (Arrows) and remove.

3

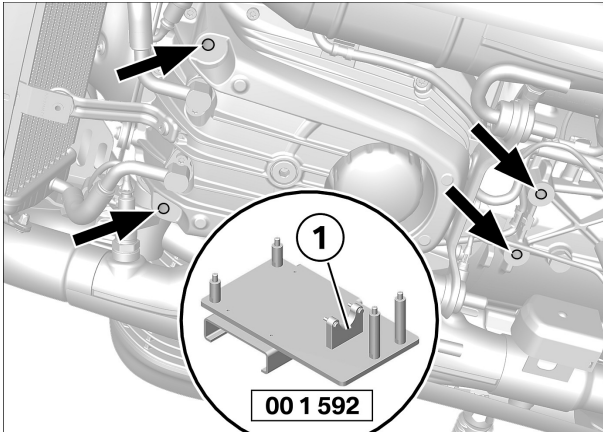
► Installing engine lifter

ATTENTION

Scratches when using auxiliary stands or similar.

Paint/surface damage

- Clean tools and mounting points on the vehicle.



- Secure extensions (00 1 575) to scissor-type lifter (00 1 571).
- Secure engine fixture (00 1 592) on engine (**arrows**).
 - Without transmission support **(1)**, disassemble as needed!

ATTENTION

Vehicle toppling to side

Risk of damage to parts if vehicle topples

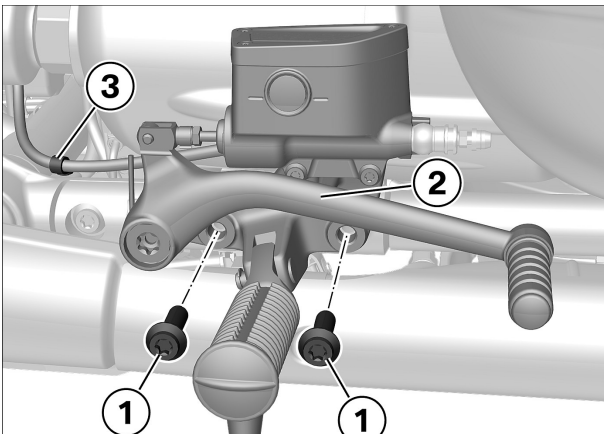
- Make sure that the vehicle is secured so that it cannot topple sideways.

- Push scissor-type lifter (00 1 571) **to the centre of** engine fixture (00 1 592).
- Lower scissor-type lifter (00 1 571) until the vehicle is secure.
- Tighten knurled screws .
- Strap down vehicle, front/rear if required.

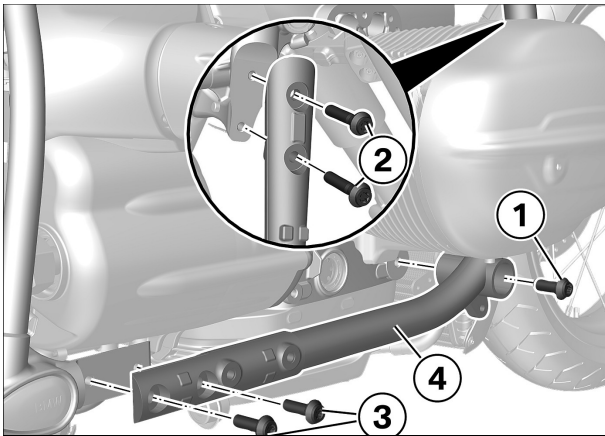
4

► Releasing front right footrest plate

- Remove screws **(1)**.
- Loosen footrest plate **(2)** and hang to the side.
 - Release brake line from holder **(3)**.
 - Protect components from scratches.



5

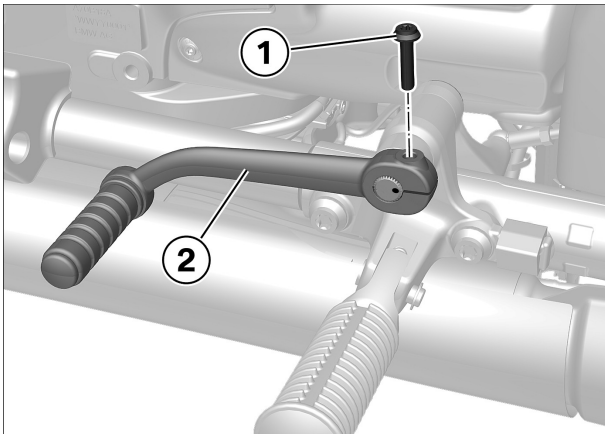


► Remove right frame bottom truss

- Remove bolt (1).
- Remove screws (2) and (3).
- Remove frame bottom truss (4).

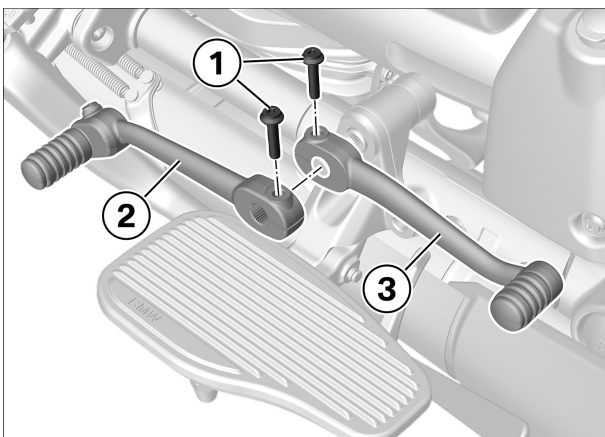


6



► Removing gearshift lever

- Remove bolt (1).
- Remove gearshift lever (2).

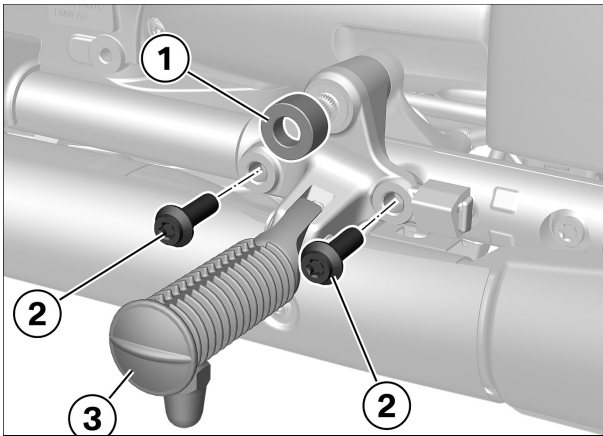


– with footboard^{OE} (036A)

- Remove screws (1).
- Remove gearshift lever (2) and (3).◇

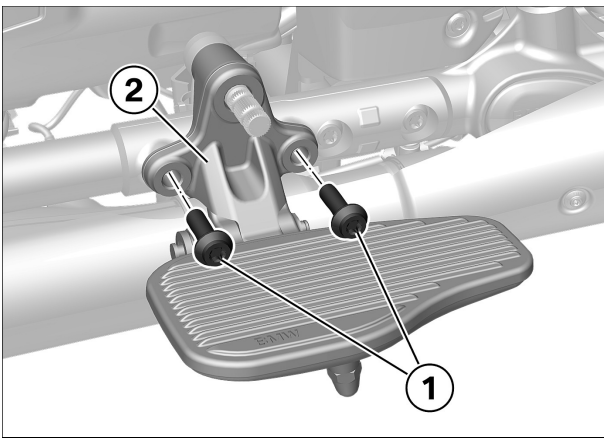


7



► Removing front left footrest plate

- Extend the side stand.
- Remove spacer sleeve **(1)**.
- Remove screws **(2)**.
- Remove the footrest plate **(3)**.

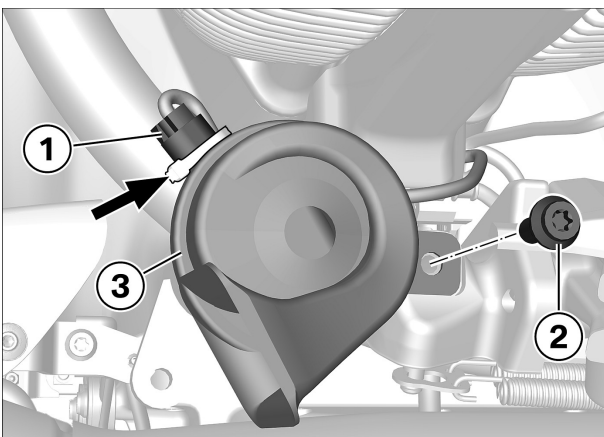


– with footboard^{OE} (036A)

- Extend the side stand.
- Remove screws **(1)**.
- Remove the footrest plate **(2)**.◇



8

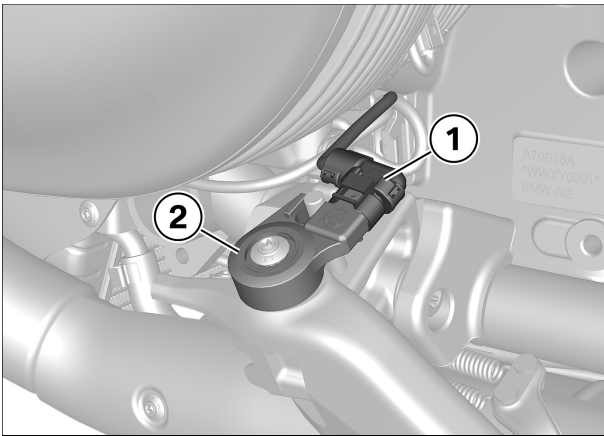


► Remove horn with retaining bracket

- Remove cable strap **(Arrow)** and disconnect connector **(1)**.
- Remove screw **(2)** and horn **(3)**.

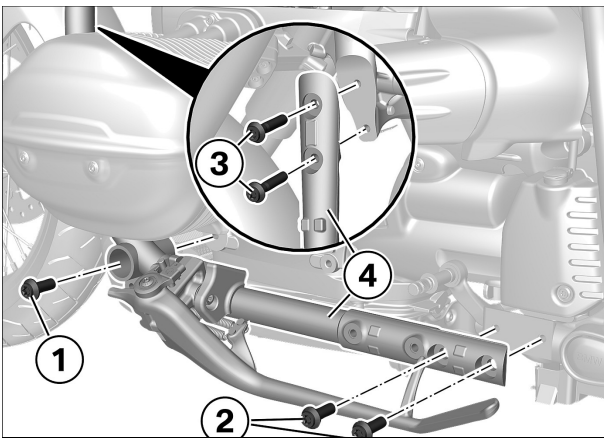


9



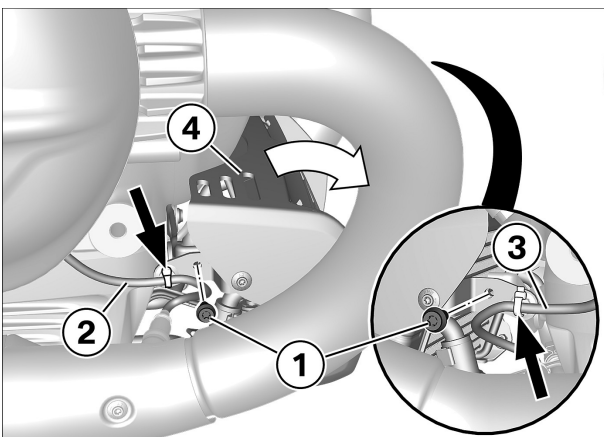
► Remove left frame bottom truss with side stand

- Disconnect connector (1) for side-stand switch (2).



- Remove bolt (1).
- Remove screws (2) and (3).
- Remove frame bottom truss (4) with side stand.

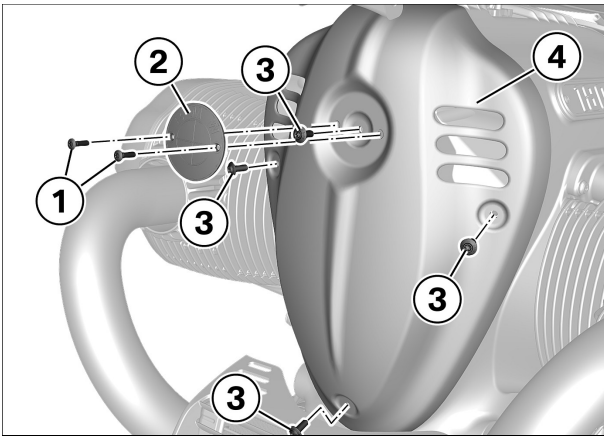
10



► Releasing oil cooler

- Remove screws (1).
- Remove cable straps (Arrows) and disconnect oxygen sensor cables (2) and (3).
- Detach oil cooler (4) at top and pivot slightly forward.

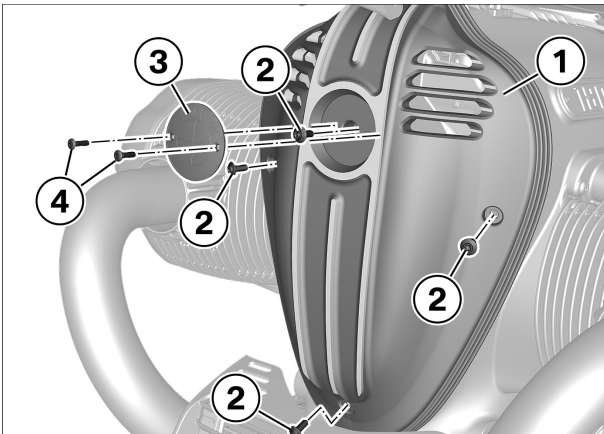
11



► Removing front crankcase cover

- Remove bolts (1) and take off badge (2). Keep badge (2), **will be reused**.
- Remove screws (3) and remove engine housing cover (4).

12



► Install new front engine housing cover

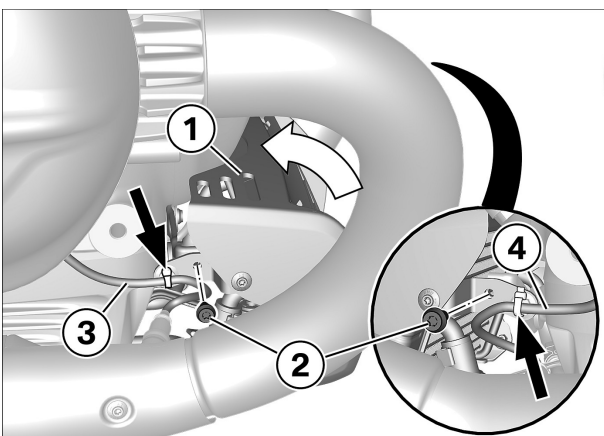
- Position new engine housing cover (1) and install screws (2).

Tightening torques		
Front engine housing cover to engine		
M6 x 20	10 Nm	

- Position badge (3) on new engine housing cover (1) and install screws (4).

Tightening torques		
Front badge		
M4 x 30	4 Nm	

13

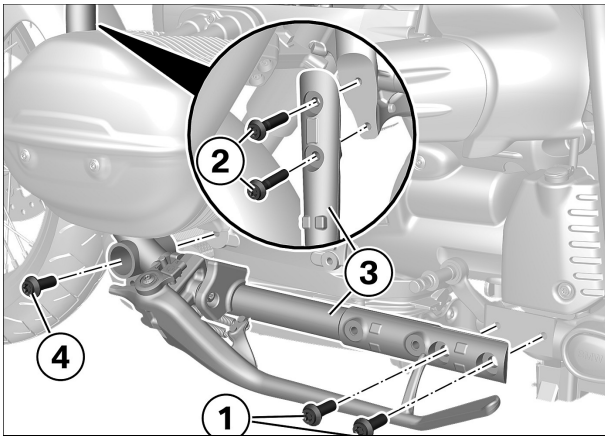


► Secure the oil cooler

- Install rear brake pads and spring.
- Pivot oil cooler (1) up and to the rear and position.
- Install screws (2).

Tightening torques		
Left/right oil cooler to bracket		
M6 x 12	10 Nm	
Thread-locking compound (micro-encapsulated)		

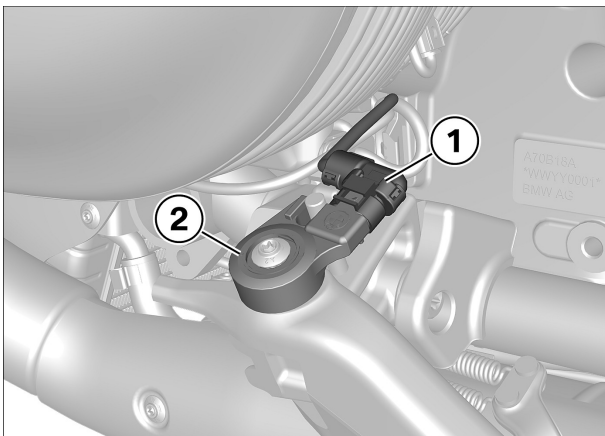
- Secure oxygen sensor cable (3) and (4) with cable strap (Arrows).



► Install left frame bottom truss with side stand

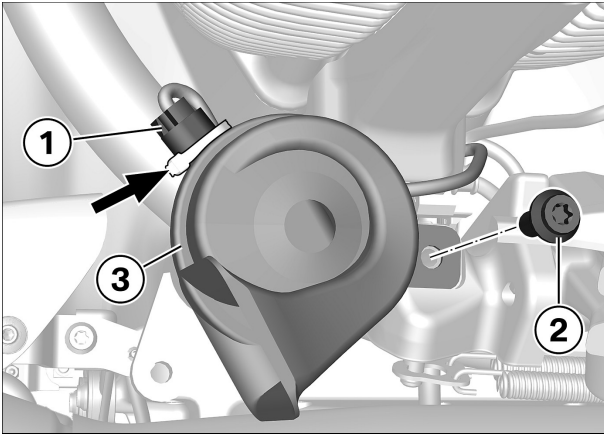
- Clean the threads of screws **(1)** and **(2)**.
- Fit frame bottom truss **(3)** with side stand, screw in bolt **(4)**.
- Screw in screws **(1)** and **(2)**.
- Tighten screws **(1)**, **(2)** and **(4)**.

🔧 Tightening torques		
Bearer to rear main frame		
M10 x 30 - 10.9, Renew screw Thread-locking compound (micro-encapsulated)	56 Nm	
Bearer to front main frame		
M10 x 45, Renew screw Thread-locking compound (micro-encapsulated)	56 Nm	
Bearer to engine		
M12 x 30	66 Nm	



- Connect connector **(1)** for side-stand switch **(2)**.

15



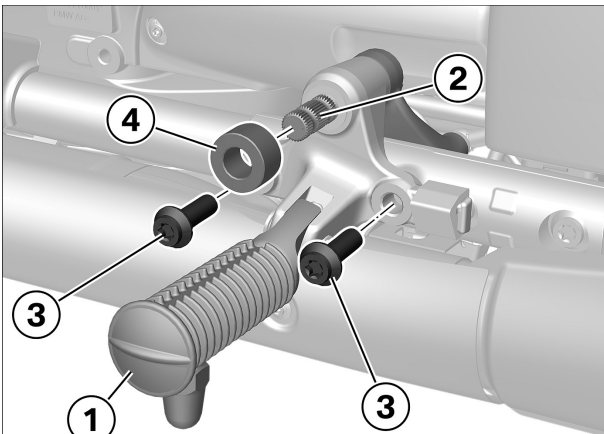
► Install horn with retaining bracket

- Install rear brake pads and spring.
- Fit horn (3) with retaining bracket.
- Install bolt (2).

🔧 Tightening torques		
Horn to frame		
M8 x 16, Renew screw	19 Nm	
Thread-locking compound (micro-encapsulated)		

- Connect connector (1) and secure cable strap (Arrow).

16



► Installing front left footrest plate

- Install rear brake pads and spring.

⚠️ ATTENTION

Damage of the bearing due to lubricants.

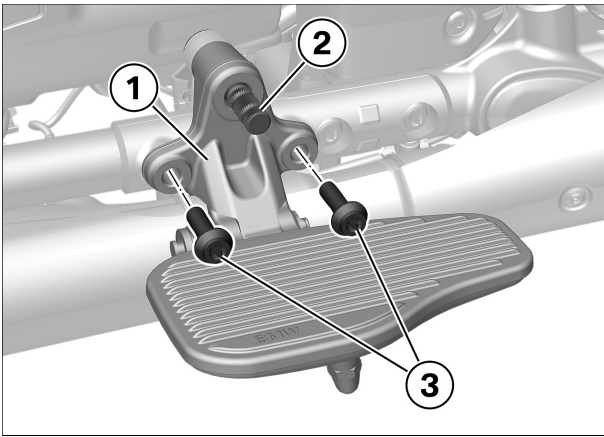
Component damage, stiff movement

- Lubricants can damage the coating chemically.
- Lubricant bind dirt particles and increase the wear by this.
- A PTFE-bearing is maintenance free; do not lubricate the bearing.

- Attach footrest plate (1) on gearshift shaft (2).
- Install screws (3).

🔧 Tightening torques		
Footrest plate to frame bottom truss		
M10 x 30 - 10.9, Replace bolt or use screw lock	56 Nm	
Thread-locking compound (micro-encapsulated)		
or, Thread-locking compound (Loctite 243, Medium strength)		

- Clean and install spacer sleeve (4).



- with footboard^{OE} (036A)
- Install rear brake pads and spring.

ATTENTION

Damage of the bearing due to lubricants.

Component damage, stiff movement

- Lubricants can damage the coating chemically.
- Lubricant bind dirt particles and increase the wear by this.
- A PTFE-bearing is maintenance free; do not lubricate the bearing.

- Attach footrest plate **(1)** on gearshift shaft **(2)**.
- Install screws **(3)**.

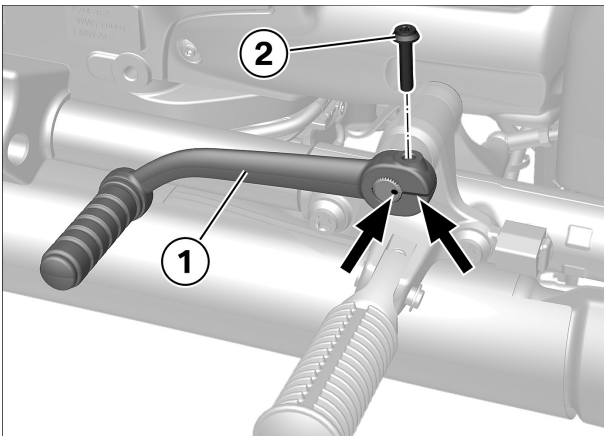
Tightening torques

Footrest plate to frame bottom truss

M10 x 30 - 10.9, Replace bolt or use screw lock
Thread-locking compound (micro-encapsulated)
or, Thread-locking compound (Loctite 243, Medium strength)

56 Nm

17



▶ Installing gearshift lever

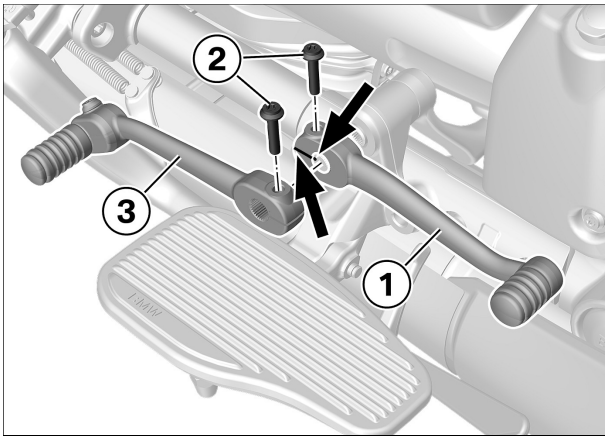
- Install rear brake pads and spring.
- Attach gearshift lever **(1)** aligning punch mark on groove **(arrows)**.
- Install bolt **(2)**.

Tightening torques

Gearshift lever to gearshift shaft

M6 x 25, Renew screw
Thread-locking compound (micro-encapsulated)

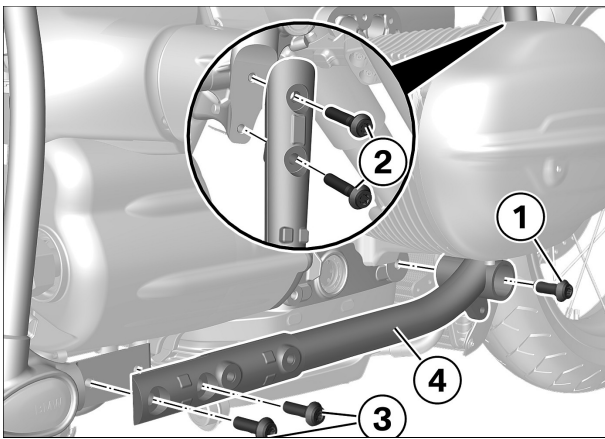
8 Nm



- with footboard^{OE} (036A)
- Install rear brake pads and spring.
- Attach gearshift lever **(1)** aligning punch mark on groove **(arrows)**.
- Attach gearshift lever **(3)** in the same way.
- Install bolt **(2)**.

🔧 Tightening torques		
Gearshift lever to gearshift shaft		
M6 x 25, Renew screw Thread-locking compound (micro-encapsulated)	8 Nm	

18

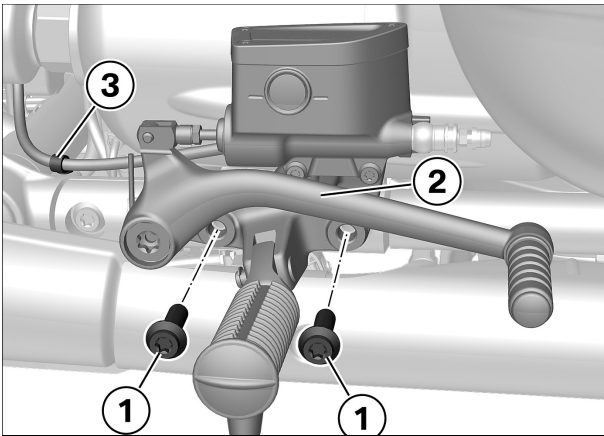


▶ **Install right frame bottom truss**

- Clean the threads of screws **(2)** and **(3)**.
- Fit frame bottom truss **(4)**, screw in bolt **(1)**.
- Screw in screws **(2)** and **(3)**.
- Tighten screws **(1)** to **(3)**.

🔧 Tightening torques		
Bearer to rear main frame		
M10 x 30 - 10.9, Renew screw Thread-locking compound (micro-encapsulated)	56 Nm	
Bearer to front main frame		
M10 x 45, Renew screw Thread-locking compound (micro-encapsulated)	56 Nm	
Bearer to engine		
M12 x 30	66 Nm	

19



► Securing front right footrest plate

- Install rear brake pads and spring.
- Position footrest plate (2).
- Install screws (1).

Tightening torques

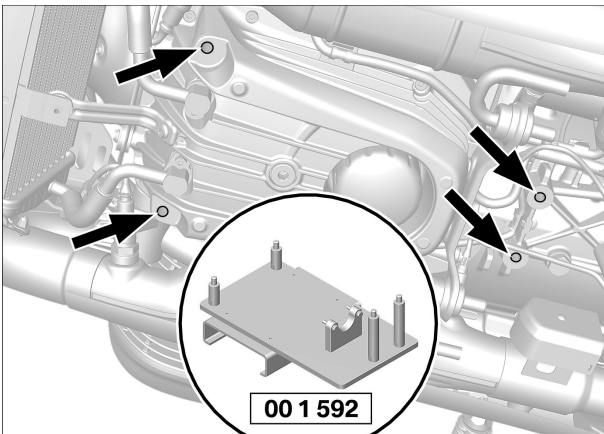
Footrest plate to frame bottom truss

M10 x 30 - 10.9, Replace bolt or use screw lock
 Thread-locking compound (micro-encapsulated)
 or, Thread-locking compound (Loctite 243, Medium strength)

56 Nm

- Secure brake line in holder (3).

20



► Removing engine lifter

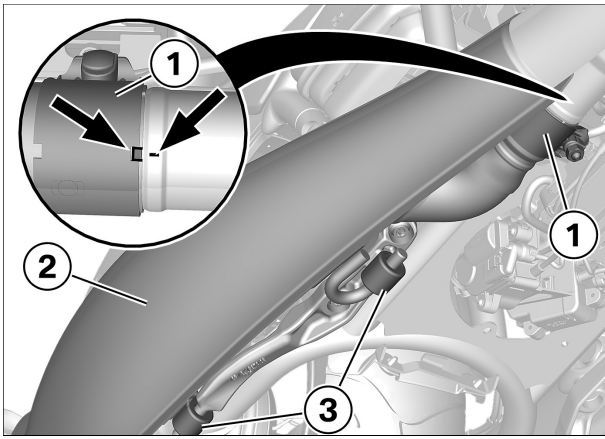
- Lower engine lifter until it is free of load. While doing so, ensure that the vehicle is secure and cannot tip over.
- Remove scissor-type lifter (00 1 571) from engine adapter (00 1 592).
- Disengage engine fixture (00 1 592) from engine.

21

► Installing right silencer

NOTICE

To ensure the leaktightness of the exhaust system, the exhaust clamps have to be lubricated for installation. It is particularly important to apply lubricant to the vicinity of the joint.



- Clean clamp **(1) inside** and lubricate lightly.

Lubricant	
Optimoly TA	18 21 9 062 599

- Install silencer **(2)** with clamp **(1)**, slide into holder **(3)**.
- Align silencer and clamp on retaining lug/line marking (**Arrows**).
- Tighten the clamp **(1)**.

Tightening torques	
Clamp to silencer and exhaust manifold	
	24 Nm

- **Align silencer ends vertically before additional angle of rotation** (parallel to rear frame/rear wheel).

22

► Install the left silencer

NOTICE

To ensure the leaktightness of the exhaust system, the exhaust clamps have to be lubricated for installation. It is particularly important to apply lubricant to the vicinity of the joint.

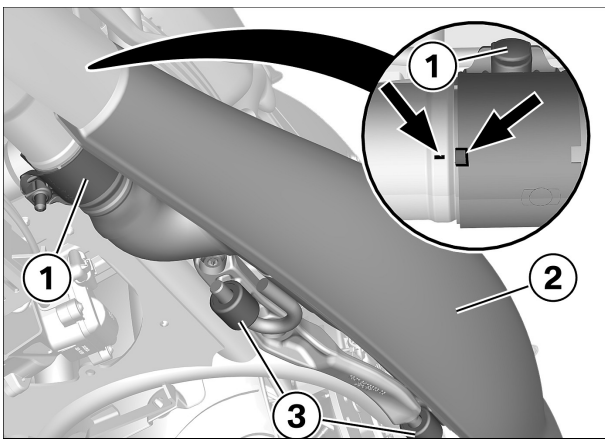
- Clean clamp **(1) inside** and lubricate lightly.

Lubricant	
Optimoly TA	18 21 9 062 599

- Install silencer **(2)** with clamp **(1)**, slide into holder **(3)**.
- Align silencer and clamp on retaining lug/line marking (**Arrows**).
- Tighten the clamp **(1)**.

Tightening torques	
Clamp to silencer and exhaust manifold	
	24 Nm

- **Align silencer ends vertically before additional angle of rotation** (parallel to rear frame/rear wheel).



23

► 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

- Select neutral.
 - » Neutral indicator light "N" lights up.
- Select a gear.
 - » Neutral indicator light "N" goes out.
- Operate the starter switch.
 - » Starter does **not** operate.
- Extend the side stand.
 - » Starter does **not** operate.
- Pull the clutch lever.
 - » Starter does **not** operate.
- Operate the starter switch.
 - » Starter does **not** operate.
- Retract the side stand.
 - » Starter does **not** operate.
- Operate the starter switch 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.

