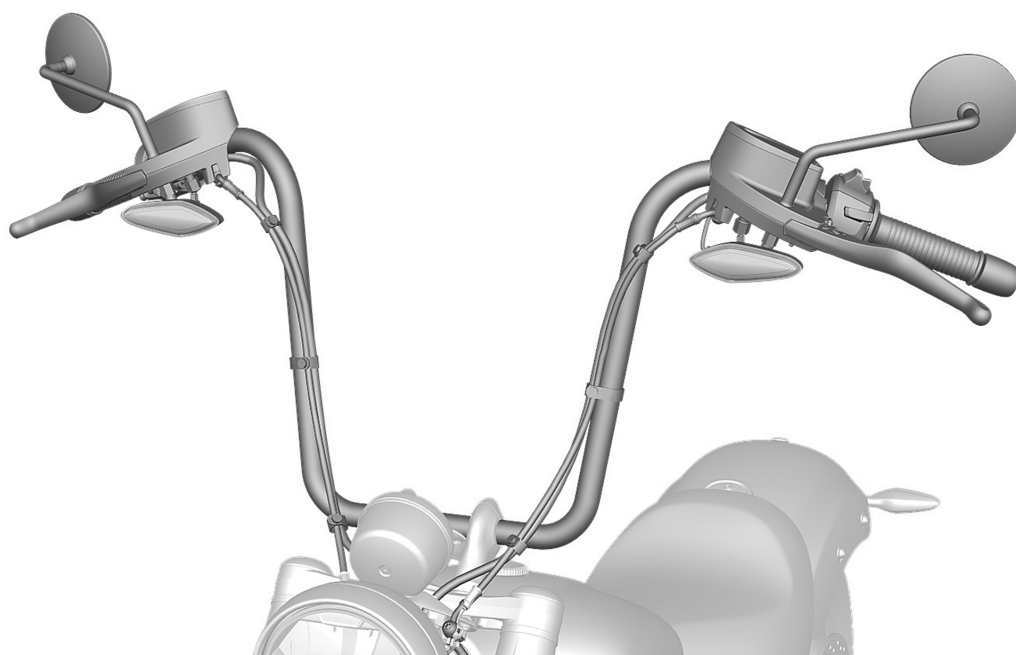




**BMW
MOTORRAD**



Installation instructions

HANDLEBARS APE- HANGER 16" OR 6.5"

R 18

MAKE LIFE A RIDE

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.

 **DANGER**

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

 **NOTICE**

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

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

 **WARNING**

Medium-risk hazard. Non-avoidance can lead 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.

 **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.

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

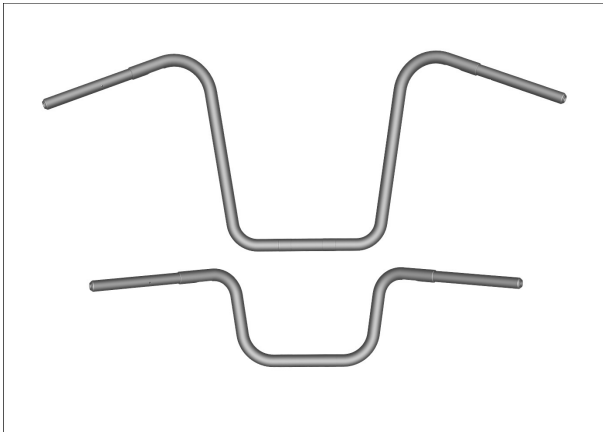
All rights reserved.

Handlebars Apehanger 16" or 6.5"

Requisite tools

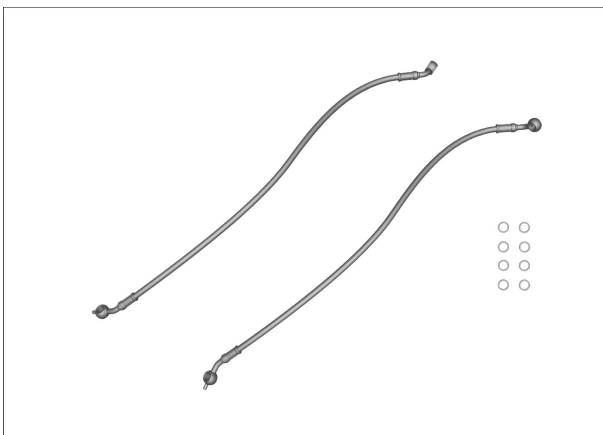
- Set of Torx bits
- Torque wrench
- Diagonal cutting pliers
- Syringe, 100ml (34 2 551)

Order No.: 83 30 0 402 192



Delivery specification

- Handlebars Apehanger 16" or handlebars Apehanger 6.5"



Also required:

- Brake line
- Clutch line
- Sealing ring

8 of



Also required:

- Assembly set electrical wiring

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

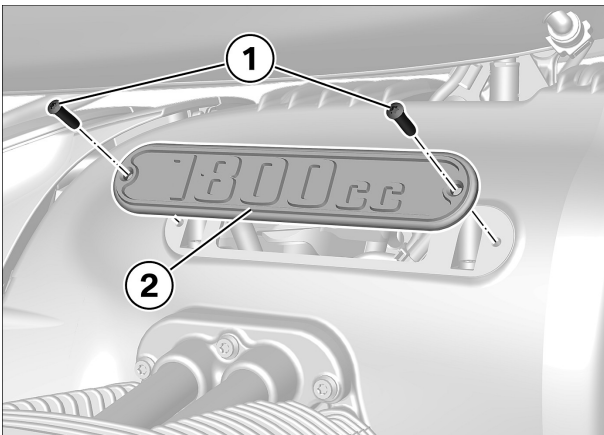
Once the retrofit kit has been installed by the workshop, these installation instructions must be handed over to the customer.

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

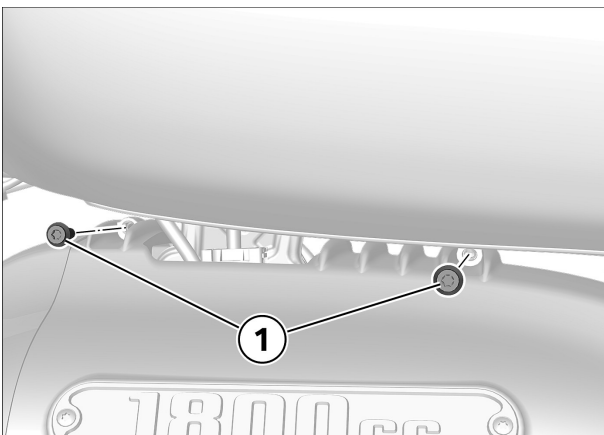
77 22 029 Install the elevated handlebars**NOTICE**

These instructions describe the installation of the accessory handlebars Apehanger 16" and Apehanger 6.5". Please select the corresponding variant.

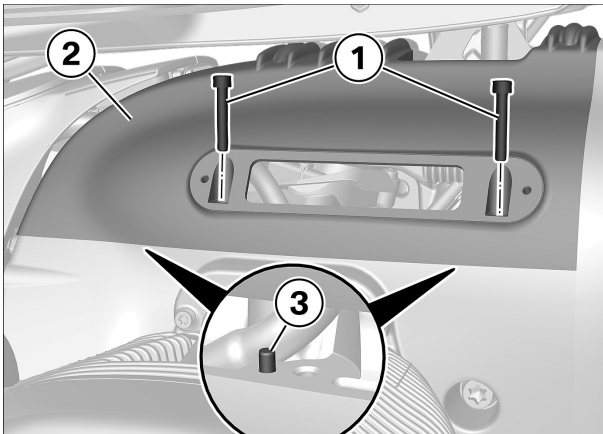
Additional work: 46 52 510 Removing and installing the rear-wheel stand special tool (motorcycles without centre stand)

1**► Remove right badge for crankcase cover**

- Remove bolts (1) and take off badge (2).

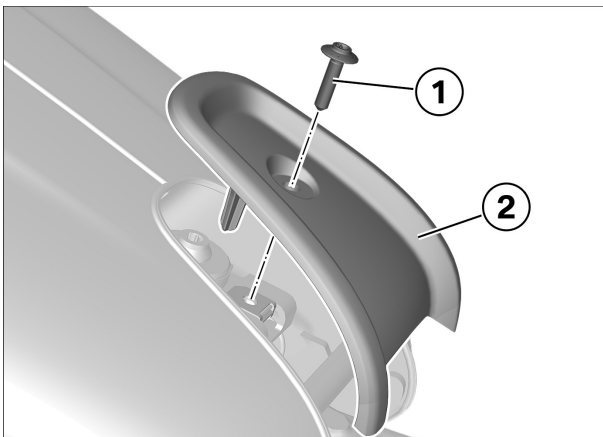
**2****► Remove right crankcase cover**

- Remove bolts (1) on the left side.



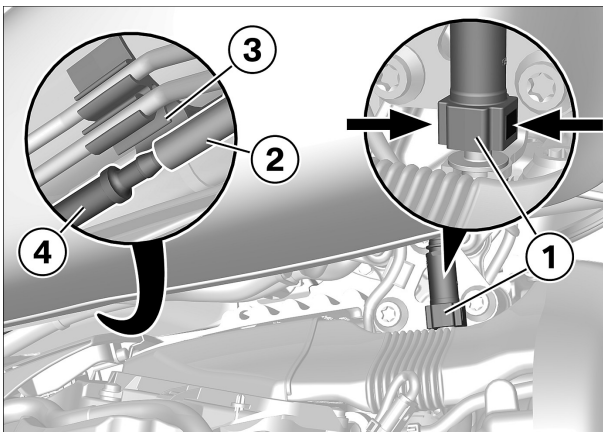
- Remove screws (1).
- Remove crankcase cover (2), checking dowel pins (3).

3



► Removing fuel tank

- Remove bolt (1) and take off tank trim (2).



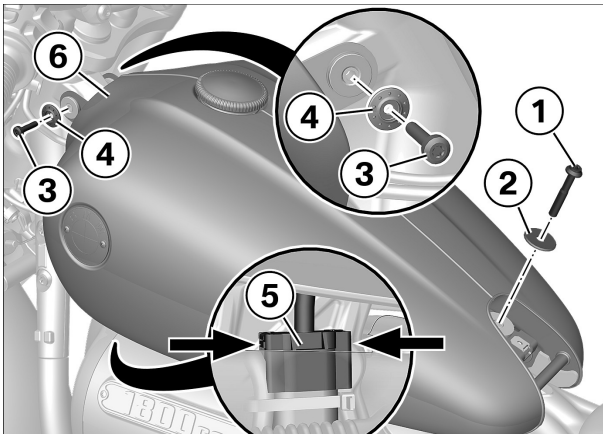
⚠ WARNING

Fuel is highly flammable and hazardous to health

Risk of fire, risk of damage to health

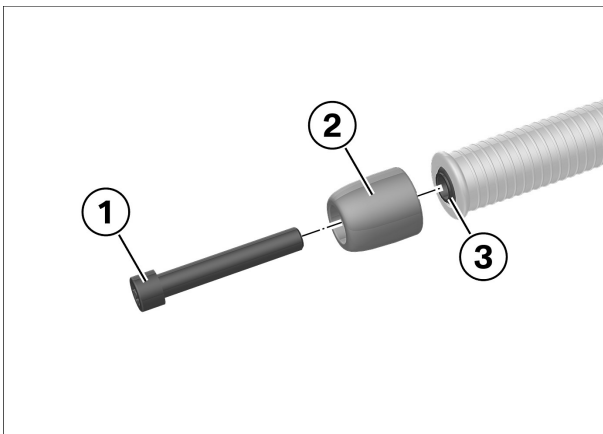
- Comply with the safety regulations.

- Disconnect quick-release coupling (1), catch emerging fuel.
- Press on quick-release coupling to stop, press in locks (**arrows**) and disconnect quick-release coupling
- Detach drainage hose (2) from holder (3) and pull off clutch (4).



- Remove screw (1) and contact disc (2).
- Remove screws (3) and washers (4) on the left and right.
- Disconnect connector (5) of the fuel-pump unit.
 - Press the locks inward.
- Lift off fuel tank (6).

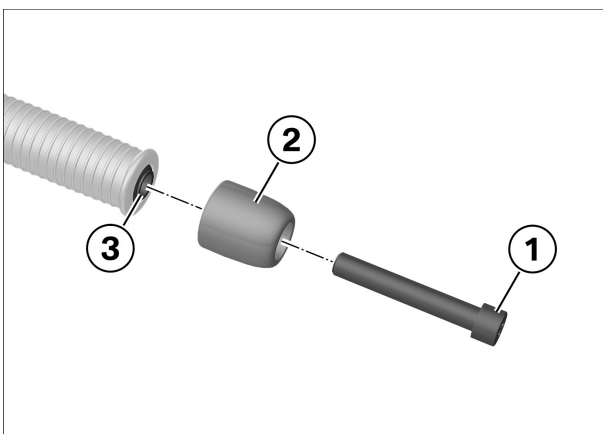
4



► Remove the left handlebar weight

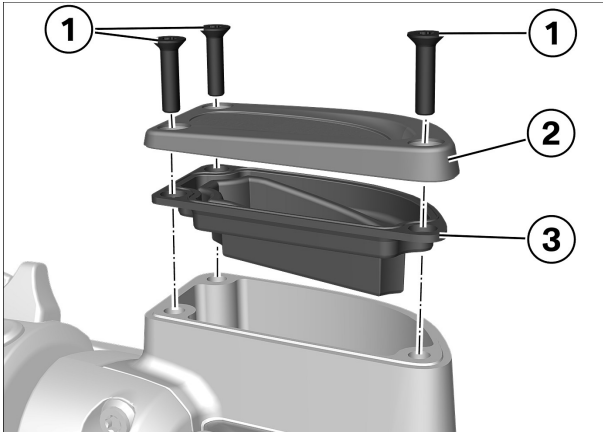
- Remove screw (1) and remove handlebar weight (2) from handlebars (3). Store handlebar weight (2), **will be reused**.

5



► Remove the right handlebar weight

- Remove screw (1) and remove handlebar weight (2) from handlebars (3). Store handlebar weight (2), **will be reused**.

6

► **Draining clutch-fluid reservoir**

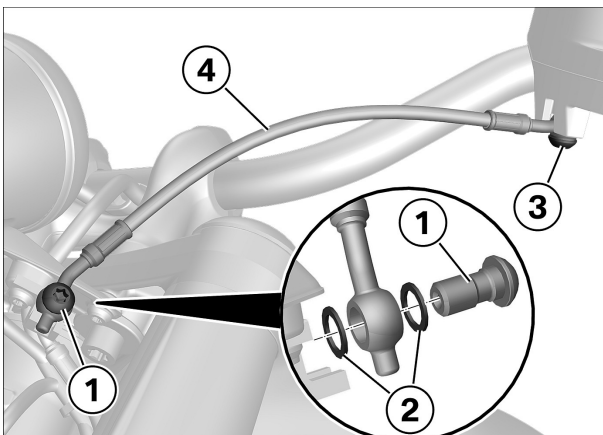
- Remove screws (1).
- Remove reservoir cap (2).
- Remove gaiter (3).
- Clean the reservoir, gaiter (3) and reservoir cap (2).

ATTENTION

Mixing of oil, brake fluid and clutch fluid

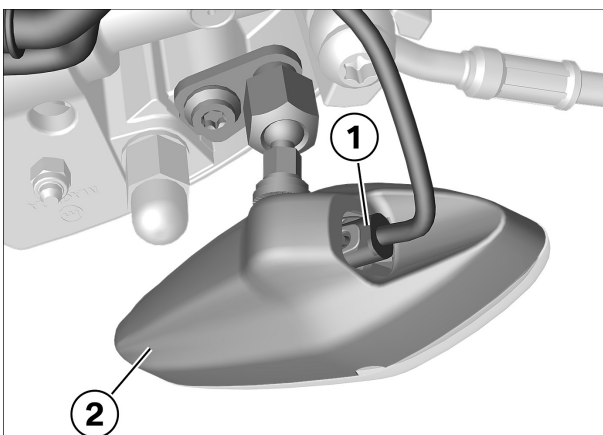
Damage to seals

- Use separate syringes and hoses.
- Draw off hydraulic fluid with syringe (34 2 551).

7

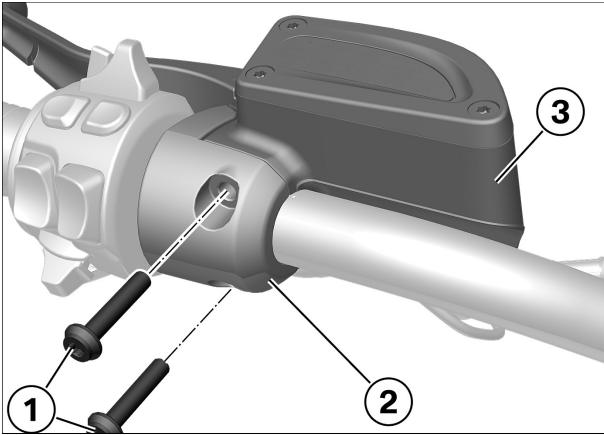
► **Removing clutch line from manual controls to fork bridge**

- Remove banjo bolt (1) with sealing rings (2) and collect the escaping fluid in a suitable container.
- Remove banjo bolt (3) in the same way and catch escaping fluid.
- Remove clutch line (4).

8

► **Removing manual controls for clutch control**

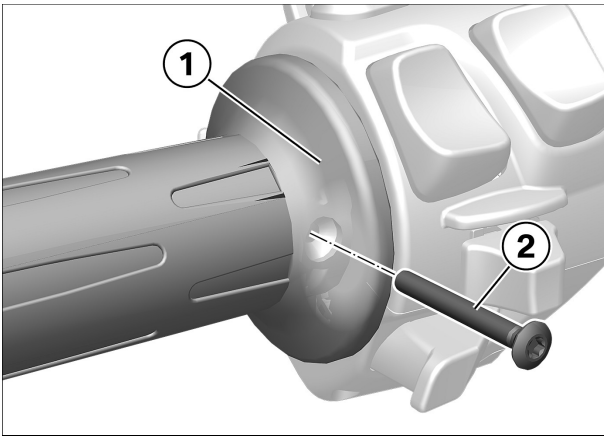
- Disconnect connector (1) from turn indicator (2).



- Remove screws **(1)**.
- Remove clamp **(2)** and clutch lever fitting **(3)**.

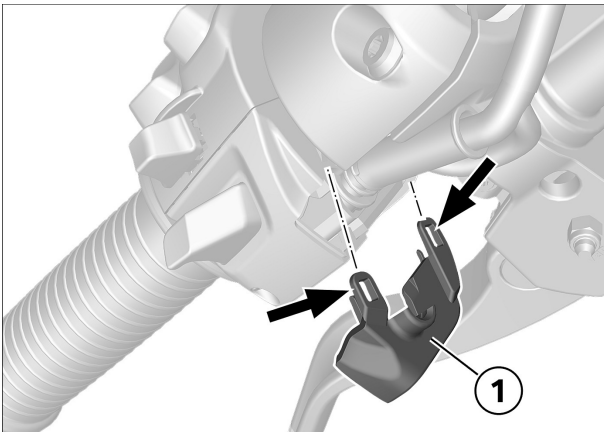


9

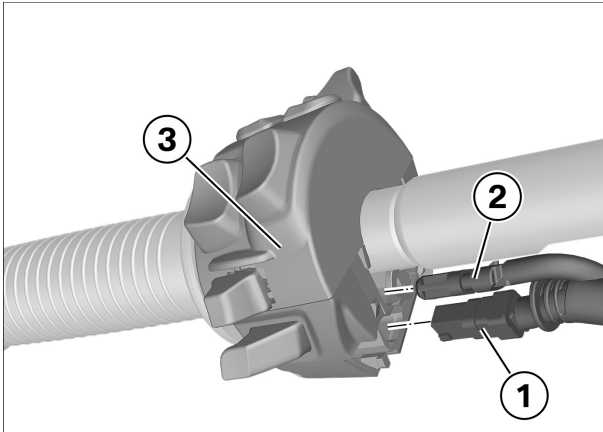


► Removing left grip unit

- Fold down rubber grip **(1)** and remove bolt **(2)**.

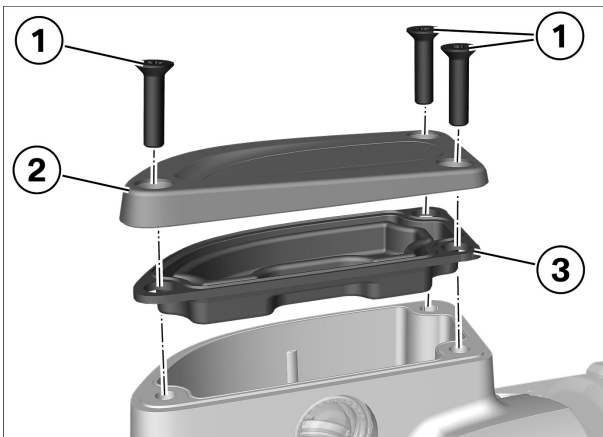


- Unclip the retaining tabs **(arrows)**.
- Remove cover **(1)**.



- Disconnect connector (1) for the multifunction switch.
- Disconnect connector (2), 2-pin.
- Pull off multifunction switch (3) with grip.

10



► Drain the brake fluid reservoir on handbrake lever fitting

- Remove screws (1).

ATTENTION

Brake fluid on painted surfaces, plastic and rubber components

Material damage

- Do not allow brake fluid to come into contact with painted surfaces, plastic or rubber components.
- Wash components immediately with clear water if required.

- Remove reservoir cap (2) and gaiter (3).
- Draw off the old brake fluid and clean the reservoir.

11

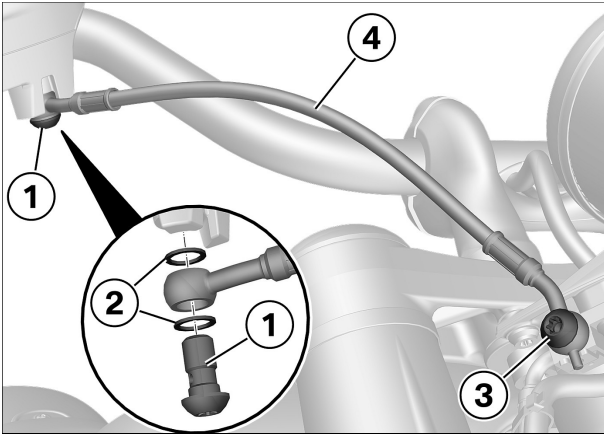
► Removing brake line in front from manual controls to fork bridge

ATTENTION

Brake fluid on painted surfaces, plastic and rubber components

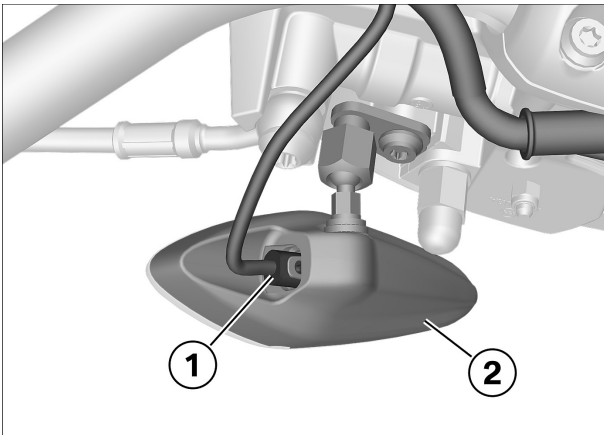
Material damage

- Do not allow brake fluid to come into contact with painted surfaces, plastic or rubber components.
- Wash components immediately with clear water if required.



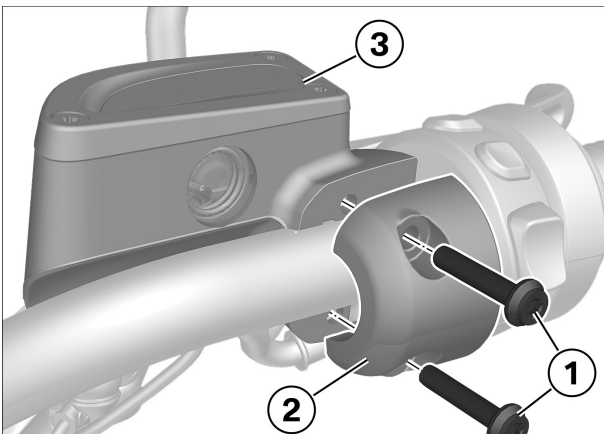
- Remove banjo bolts **(1)** with sealing rings **(2)** and catch the escaping residual fluid by suitable means.
- Remove banjo bolts **(3)** in the same way and catch escaping fluid.
- Remove brake line **(4)**.

12



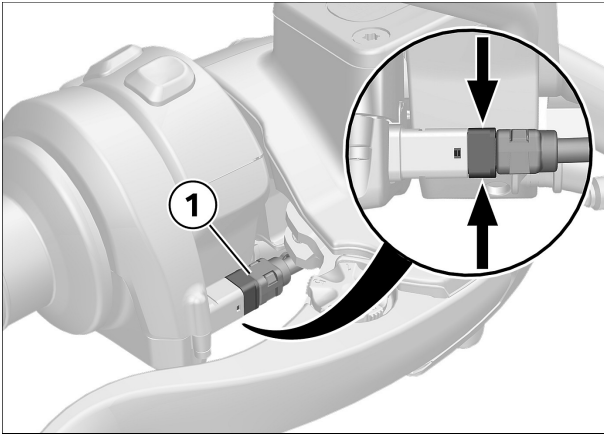
▶ Removing brake fitting for front wheel

- Disconnect connector **(1)** from turn indicator **(2)**.



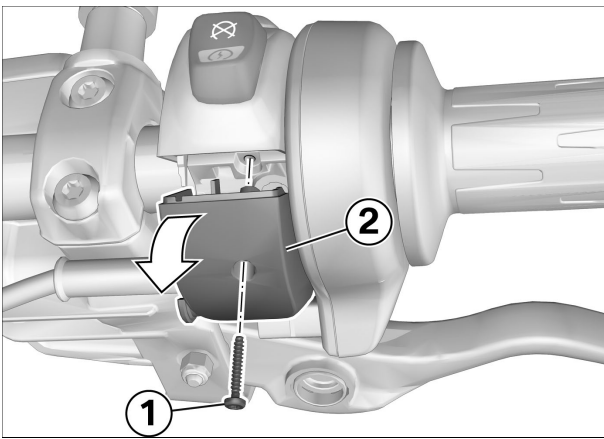
- Remove screws **(1)**.
- Remove clamp **(2)** and brake fitting **(3)**.

13

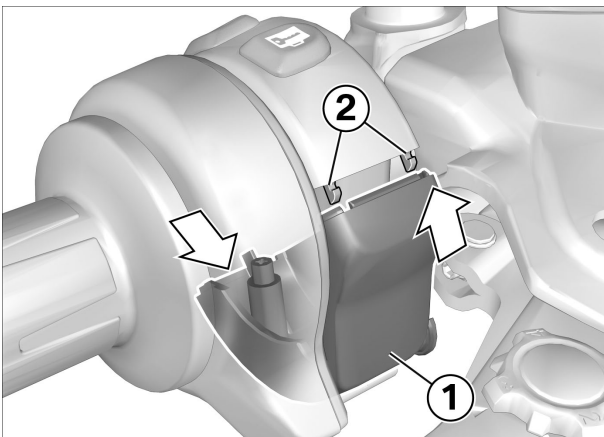


► **Removing right multifunction switch**

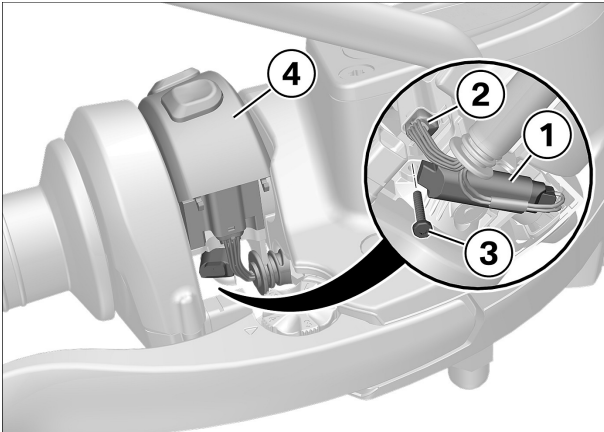
- Press the releases (**arrows**) at front and back and disconnect connector **(1)** for the throttle grip.



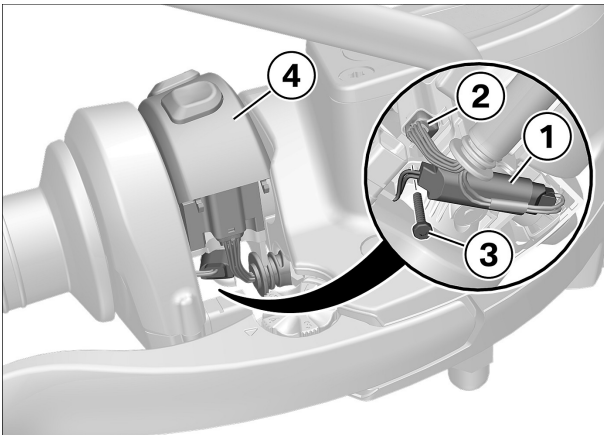
- Remove bolt **(1)**.
- Pull cover **(2)** down slightly.



- Push cover **(1)** forward and up to remove, noting retaining catches **(2)**.

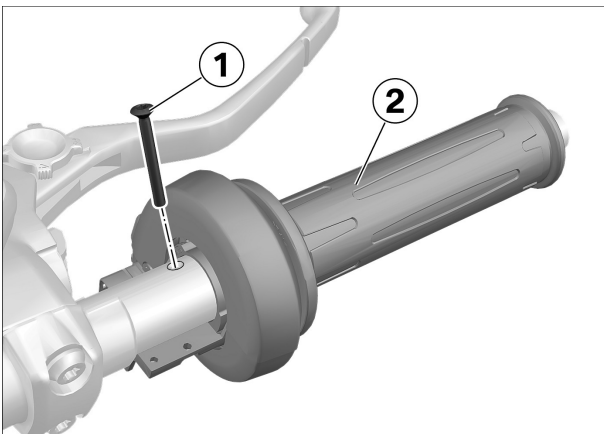


- Unclip the 2-pin connector **(1)** with the blind cap.
- Disconnect connector **(2)** for the multifunction switch.
- Remove bolt **(3)**.
- Remove multifunction switch **(4)**.



- with heated grips^{OE} (0519)
- Disconnect connector **(1)** for the heated grip and unclip it.
- Disconnect connector **(2)** for the multifunction switch.
- Remove bolt **(3)**.
- Remove multifunction switch **(4)**.◇

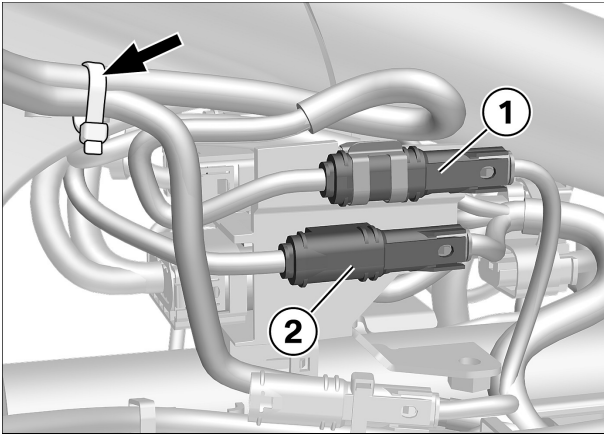
14



► Removing throttle grip

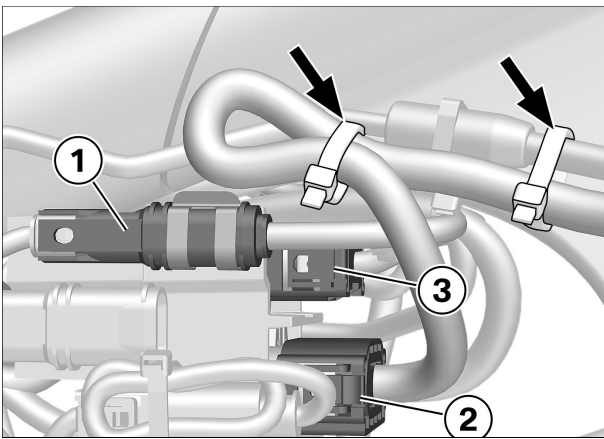
- Remove bolt **(1)**.
- Remove throttle grip **(2)**.

15

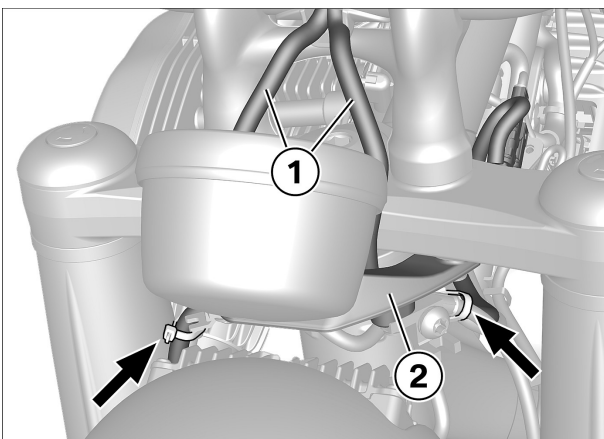


► **Disconnect handlebar wiring harness and loosen**

- Remove cable strap (**arrow**).
- Loosen and disconnect plug connection **(1)** for left turn indicator.
- Loosen and disconnect plug connection **(2)**.



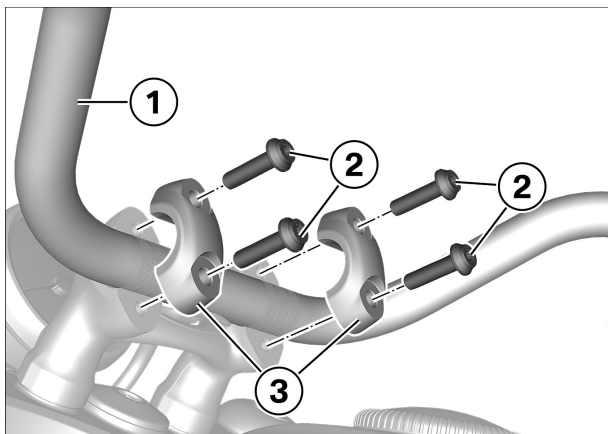
- Remove the cable strap (**arrows**).
- Release and disconnect plug **(1)** for right turn indicator.
- Disconnect connectors **(2)** and **(3)**.



- Remove the cable strap (**arrows**).
- Thread wiring harnesses **(1)** for handlebars out of holder **(2)** for instrument cluster.



16



▶ Removing handlebars

ATTENTION

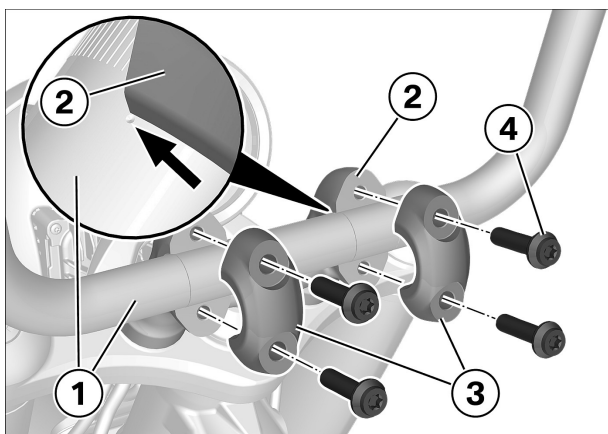
Use of hard or sharp-edged objects in proximity to component

Component damage

- Take care not to scratch components; cover or mask as necessary.


- Protect handlebars (1) from folding out, such as by suspension.
- Remove screws (2).
- Remove handlebar clamping blocks (3) and handlebars (1).

17



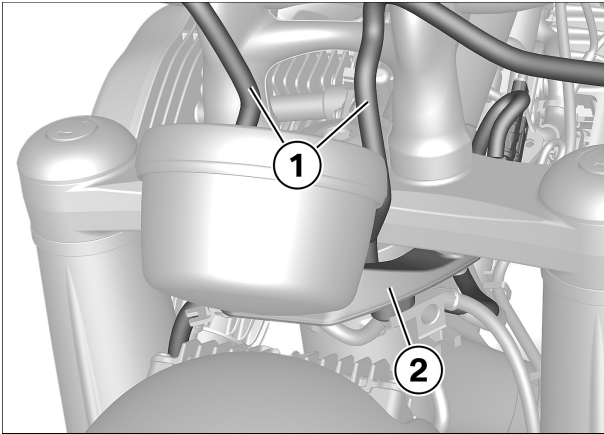
▶ Installing handlebars Apehanger

- Position handlebars (1) centred on clamping block (2).
- Attach handlebar clamping blocks (3) and install bolts (4) loosely.
- Align handlebars (1) with mark (arrow) on clamping block (2), noting the correct mark for another handlebar clamping block, if necessary.
- Tighten the screws (4).

 Tightening torques		
Handlebar clamping block, top, to handlebar clamping block, bottom (handlebar clamp)		
M8 x 30	Tightening sequence: in the forward direction of travel, tighten until seated	
	24 Nm	

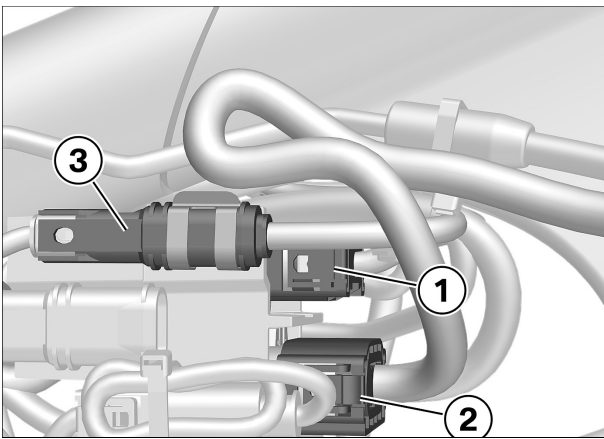
» A gap forms at rear in direction of travel.

18

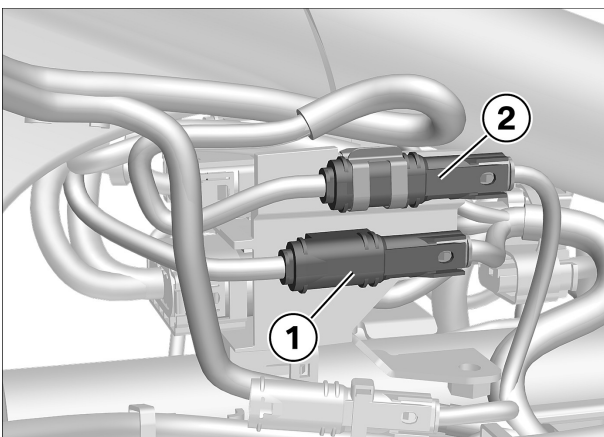


► **Working in and connecting new handlebar wiring harnesses**

- Work wiring harnesses (1) for handlebars into holder (2) for instrument cluster.

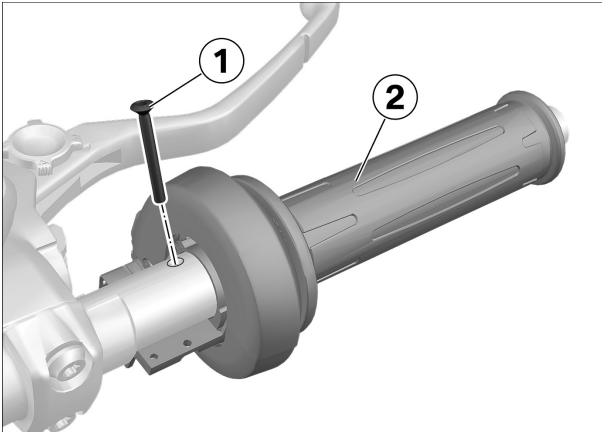


- Connect connectors (1) and (2).
- Connect connector (3) for the right turn indicator and secure it.




- Connect and secure the plug connection (1).
- Connect and secure plug connection (2) for left turn indicator.

19

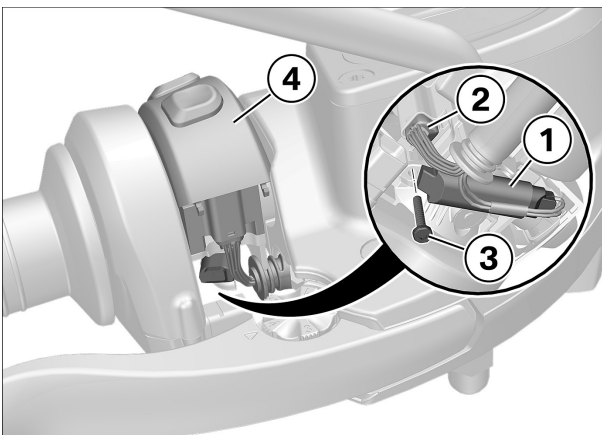


► **Installing throttle grip**

- Install throttle grip (2).
- Install bolt (1).

 Tightening torques		
Throttle twistgrip to handlebar		
M3.5 x 30	2 Nm	

20



► **Installing right multifunction switch**


- Hold the multifunction switch (4) in position.

 **ATTENTION**

Screws overtightened past the specified value
Component damage

- Tighten the screws only to their specified tightening torque.

- Install bolt (3).

 Tightening torques		
Multifunction switch to grip unit		
2.5 x 15	0.4 Nm	

- Connect connector (2) for the multifunction switch.
- Connect 2-pin connector (1) with the blanking cap.

– with heated grips^{OE} (0519)


- Hold the multifunction switch (4) in position.

 **ATTENTION**

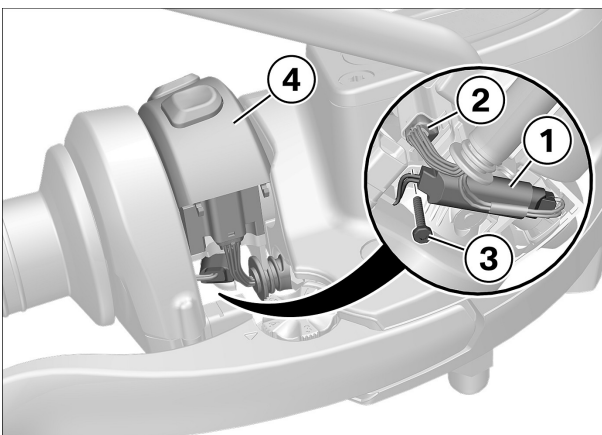
Screws overtightened past the specified value
Component damage

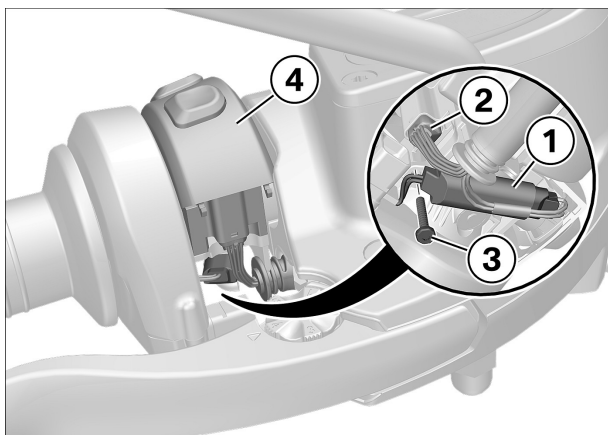
- Tighten the screws only to their specified tightening torque.

- Install bolt (3).

 Tightening torques		
Multifunction switch to grip unit		
2.5 x 15	0.4 Nm	

- Connect connector (2) for the multifunction switch.





- Connect connector **(1)** for the heated grip and clip it into position.◇

– with heated grips^{OE} (0519)

- Hold the multifunction switch **(4)** in position.

ATTENTION

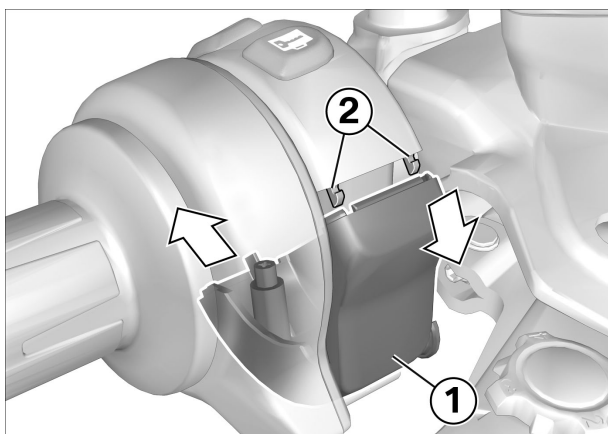
Screws overtightened past the specified value
Component damage

- Tighten the screws only to their specified tightening torque.

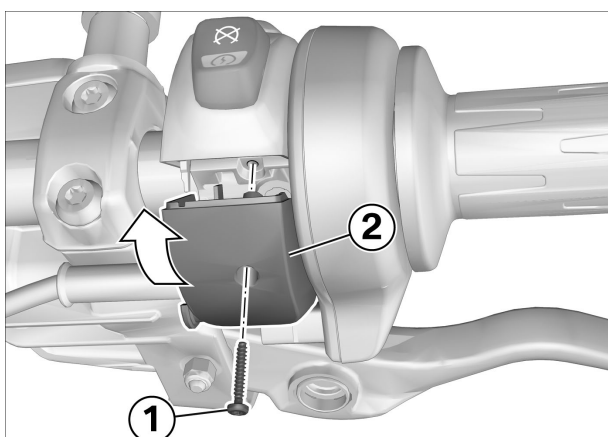
- Install bolt **(3)**.

Tightening torques		
Multifunction switch to grip unit		
2.5 x 15	0.4 Nm	

- Connect connector **(2)** for the multifunction switch.
- Connect connector **(1)** for the heated grip and clip it into position.◇



- Position cover **(1)** and push backwards and down, paying attention to **retaining catches(2)**.



- Push cover **(2)** until the multifunction switch is closed.

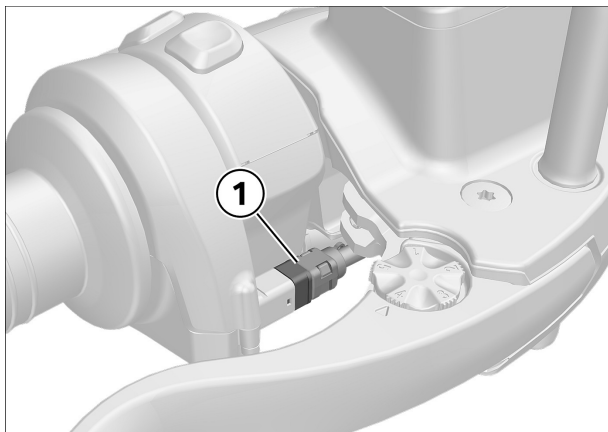
ATTENTION

Screws overtightened past the specified value
Component damage

- Tighten the screws only to their specified tightening torque.

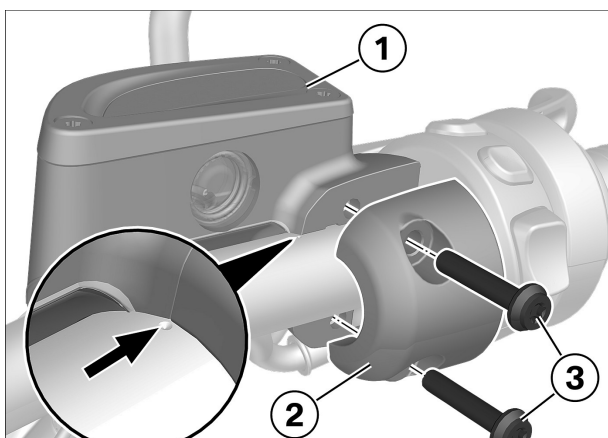
- Install bolt **(1)**.

Tightening torques		
Cover to multifunction switch		
Screw for plastic, 2.5 x 15	0.4 Nm	



- Connect connector (1) for throttle grip.

21

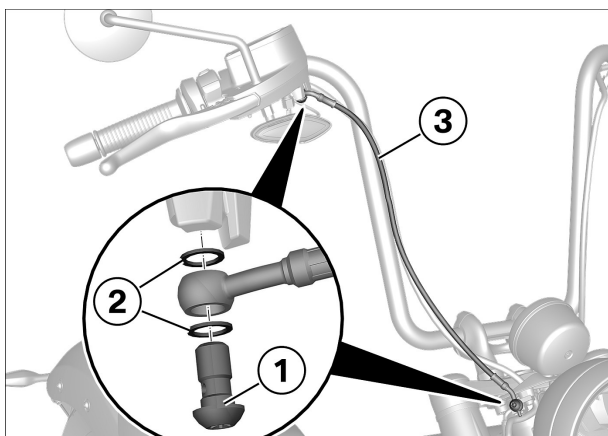


▶ Installing brake fitting for front wheel

- Fit brake fitting (1).
- Fit clamp (2) and install, but do not tighten, screws (3).
- Align handbrake fitting (1) at mark (arrow).
- Tighten the screws (3).

🔧 Tightening torques		
Handbrake fitting to handlebars		
M6 x 30	Tightening sequence: tighten top until fully closed	
	8 Nm	

22



▶ Installing brake line in front from manual controls to fork bridge

- Insert banjo bolts (1) with new sealing rings (2) in brake line (3).
- Position brake line (3) and secure with banjo bolts (1), first on top, then on the bottom.
- Tighten banjo bolts (1).

🔧 Tightening torques		
Brake line with banjo bolt to components		
M10 x 1	24 Nm	

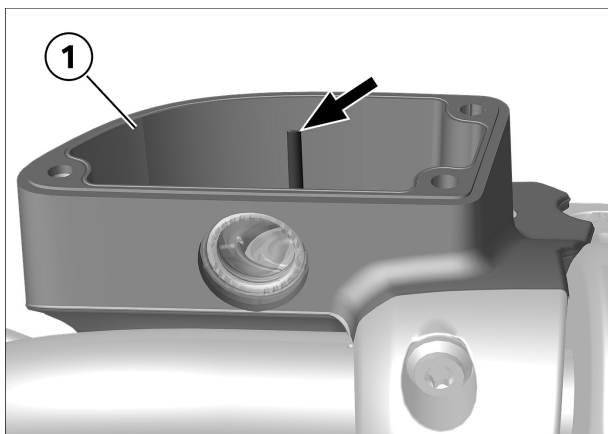
23

► Filling and bleeding brake fitting

⚠ WARNING

Water ingress in the brake fluid due to air humidity
 Decrease in the boiling point, formation of vapour bubbles reduces the effectiveness of the brakes.


- Use only fresh brake fluid from an unopened container.
- Adjust brake lever to maximum distance through knurled wheel .
- Turn the handlebars to a position in which the brake fluid tank (1) is horizontal.

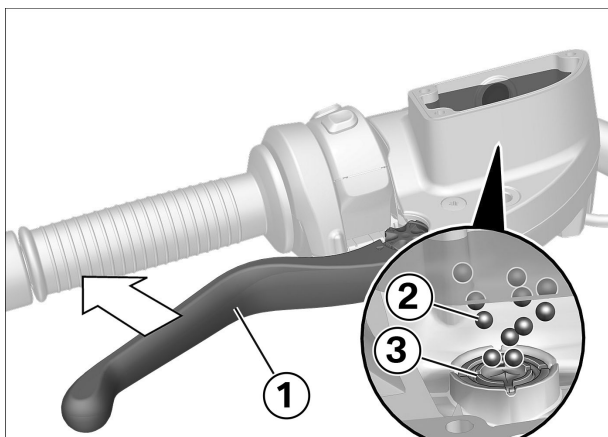


⚠ WARNING

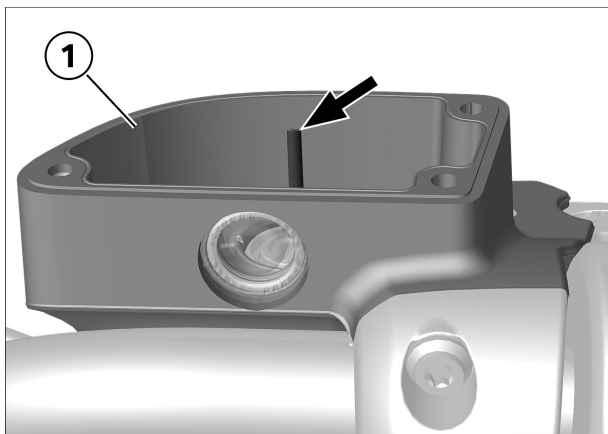
Water ingress in the brake fluid due to air humidity
 Decrease in the boiling point, formation of vapour bubbles reduces the effectiveness of the brakes.

- Use only fresh brake fluid from an unopened container.
- Top up with fresh brake fluid to the MAX mark (arrow).

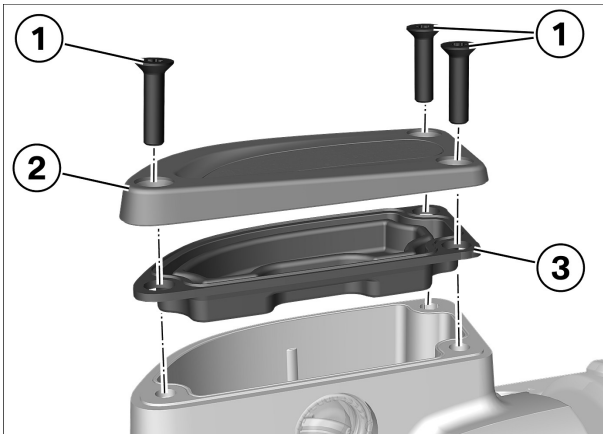
 Hydraulic fluid	
Brake fluid, DOT4	



- Vent the brake system by several small strokes on brake lever (1).
- Repeat this step until air bubbles (2) cease to escape from base valve (3) and a **clear pressure point** is perceptible.
- While bleeding, repeatedly turn handlebars carefully to change position of brake fitting.
- Move brake line back and forth to release air bubbles.



- Turn the handlebars to a position in which the brake fluid tank (1) is horizontal.
- If necessary, top up the brake fluid to the MAX mark (arrow).



ATTENTION

Escaping brake fluid

Component damage

- Carefully clean the sealing faces before installing the diaphragm in the brake-fluid reservoir.

- Clean the rim of the reservoir.
- Clean gaiter (3) and reservoir cap (2) and install.
- Install screws (1).

Check

- Check brake pressure by operating the brakes.

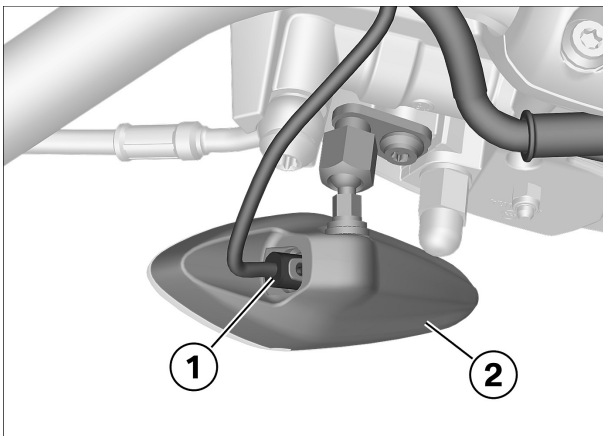
Result

Low brake pressure

Measure

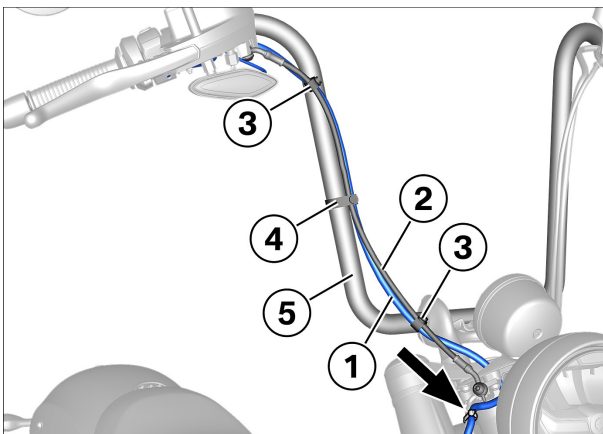
- **On completion of all work place the motorcycle on its side stand** and repeatedly short-pull the brake lever to expel the **residual** air from the handbrake cylinder.

24



► **Securing wiring harness for handlebars, right**

- Connect connector (1) with turn indicator (2).

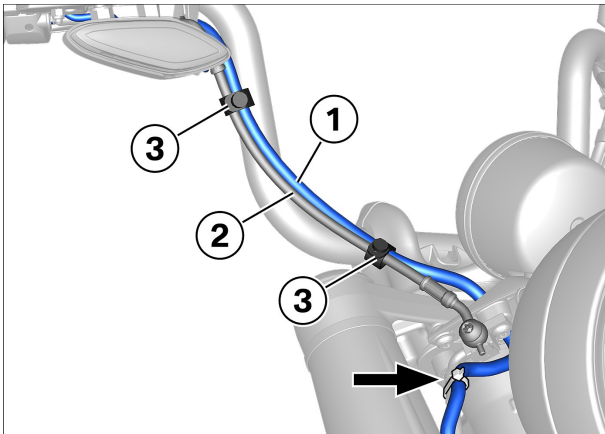


- Route wiring harness (1) to brake line (2) and secure with short tensioning straps (3).
- Secure wiring harness (1) and brake line (2) with long tensioning strap (4) on handlebars Apehanger 16" (5).

NOTICE

These instructions describe the installation of the accessory handlebars Apehanger 16" and Apehanger 6.5". Please select the corresponding variant.

- Secure the cable strap (arrow).

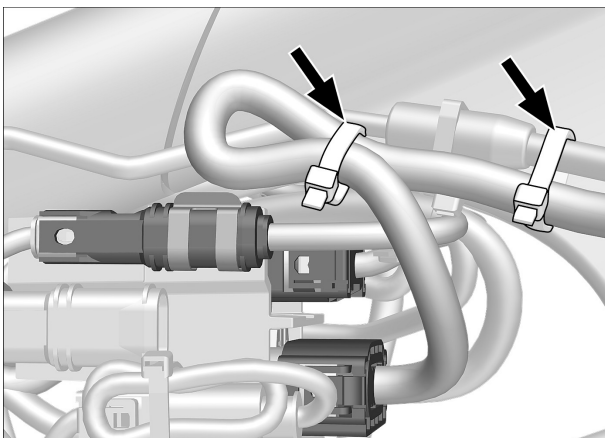


- Route wiring harness **(1)** to brake line **(2)** and secure with short tensioning straps **(3)**.

NOTICE

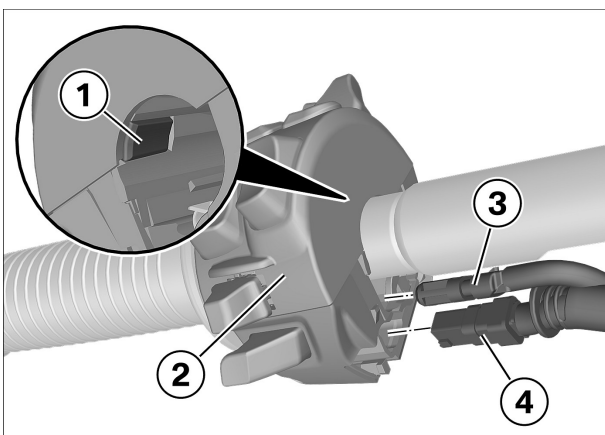
These instructions describe the installation of the accessory handlebars Apehanger 16" and Apehanger 6.5". Please select the corresponding variant.

- For handlebars Apehanger 6.5", further fastening of the brake line **(2)** is not necessary.
- Secure the cable strap **(arrow)**.



- Form excess lengths of cables into loops and secure cable straps **(arrows)**.

25



► **Install the left grip unit**

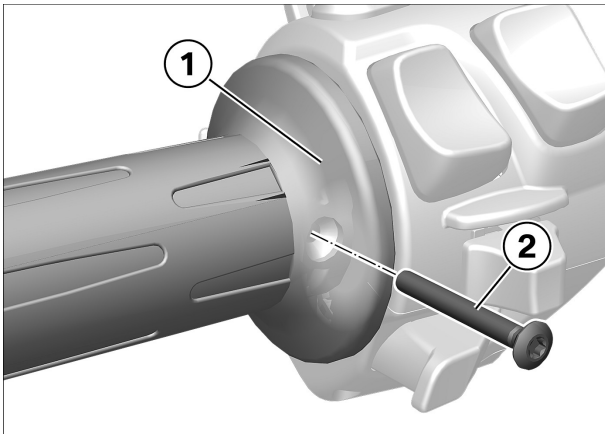
- Lubricate rubber part **(1)**.




Installation tool

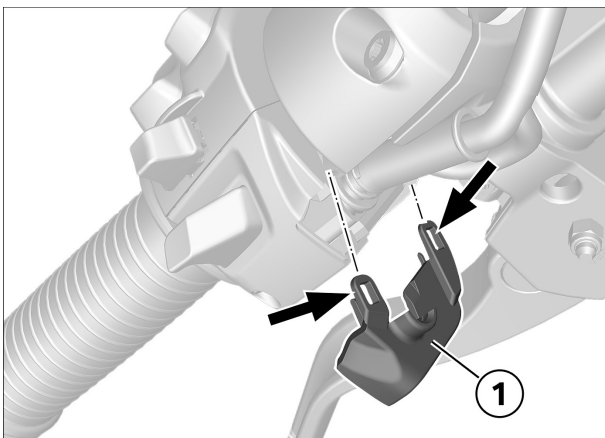
Silicone spray	83 19 2 208 609
----------------	-----------------

- Slide on multifunction switch **(2)** with grip.
- Connect 2-pin connector **(3)** with the blanking plug.
- Connect connector **(4)** for the multifunction switch.



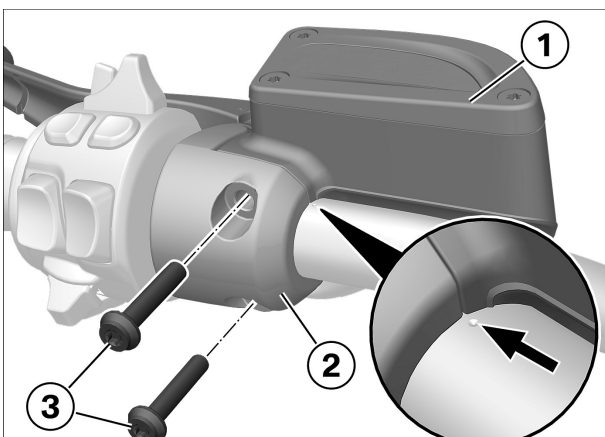
- Fold down rubber grip (1) and install bolt (2).

 Tightening torques		
Handlebar grip, left, to handlebar		
M3.5 x 30	2 Nm	




- Install the cover (1).
- » The retaining tabs (arrows) engage.

26

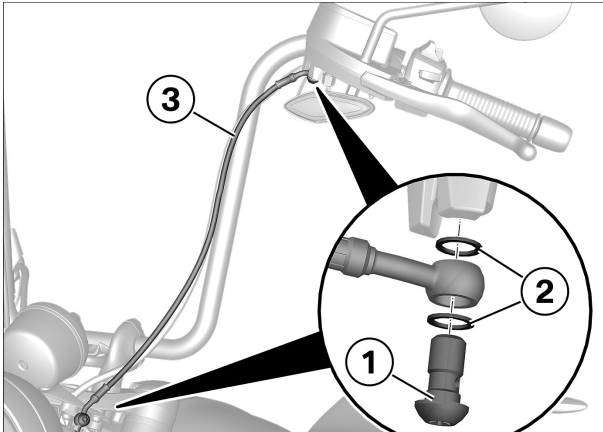


► Installing manual controls for clutch control

- Fit clutch lever fitting (1) and clamp (2). Install bolts (3), do not tighten.
- Align clutch lever fitting (1) at mark (arrow) and tighten screws (3).

 Tightening torques		
Clutch lever fitting to handlebar		
M6 x 30	Tightening sequence: tighten top until fully closed	
		8 Nm

27

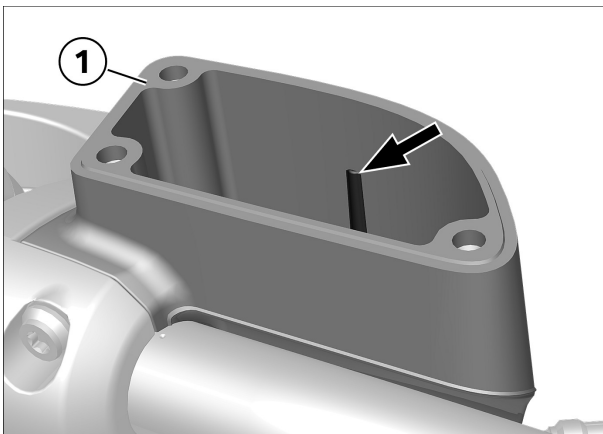


► **Installing clutch line from manual controls to fork bridge**

- Insert banjo bolts (1) with new sealing rings (2) in clutch line (3).
- Position clutch line (3) and secure with banjo bolts (1), first on top, then on the bottom
- Tighten banjo bolts (1).

Tightening torques		
Clutch line to handlebar fittings or distributor ignition		
M10 x 1	22 Nm	

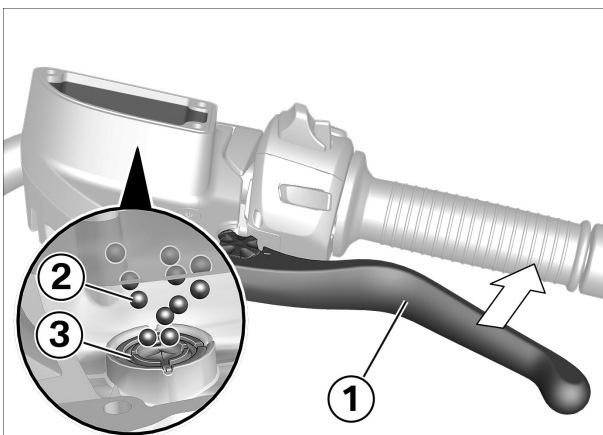
28



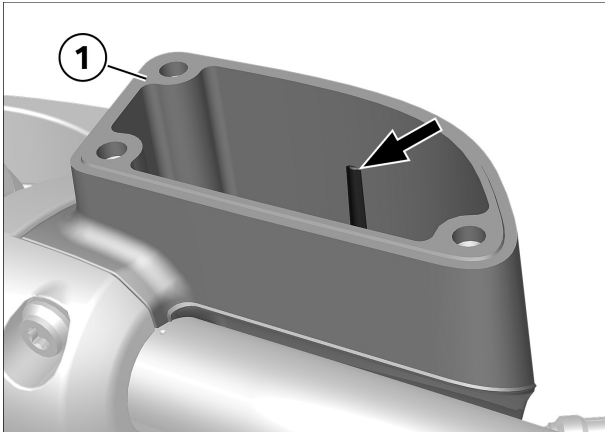
► **Filling and bleeding clutch lever fitting**

- Adjust clutch lever with adjuster knob to maximum distance.
- Turn the handlebars to a position in which the clutch-fluid reservoir (1) is horizontal.
- Top up clutch fluid to MAX mark (arrow).


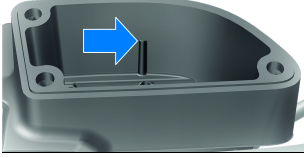
Hydraulic fluid	
Hyspin V10	21 52 0 392 546

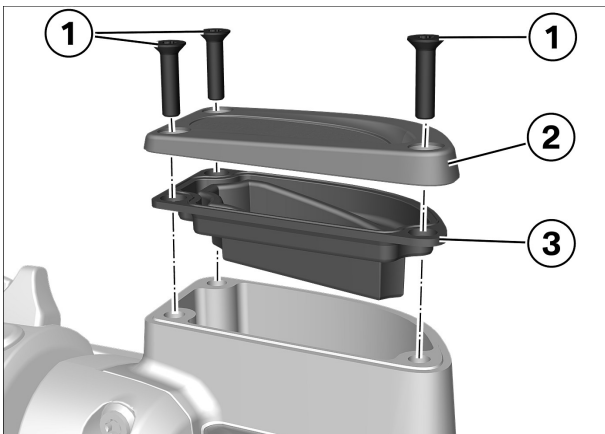


- Vent clutch system with multiple short pulls on the clutch lever.
 - Vent until air bubbles cease to rise.
 - Vent until a pressure point is clearly felt.
- While bleeding, repeatedly turn handlebars carefully to change position of clutch lever fitting.
- Move clutch line back and forth to release air bubbles.



- Turn the handlebars to a position in which the clutch-fluid reservoir **(1)** is horizontal.
- If necessary, top up clutch fluid to MAX mark **(arrow)**.

 Technical data			
Clutch-fluid level (repairs)			
			
	with new clutch lining, expansion tank is positioned horizontally	Mark in reservoir	
Hydraulic fluid (Hyspin V10)			



- Clean the rim of the reservoir.
- Clean gaiter **(3)** and reservoir cap **(2)** and install.
- Install screws **(1)**.

Check

- Check resistance point by operating the clutch.

Result

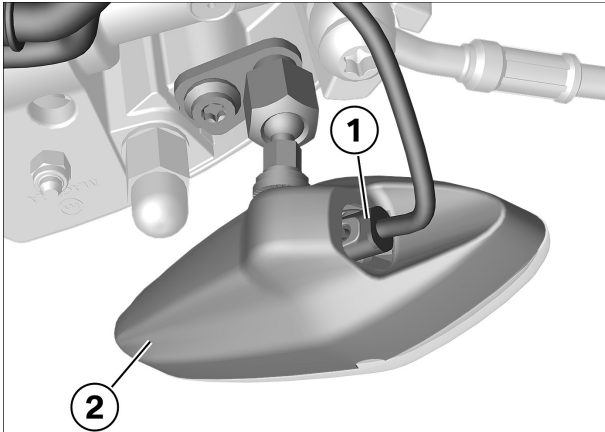
poor resistance point

Measure

- **On completion of all work, place the vehicle on its side stand** and repeatedly short-pull the clutch lever to expel the **residual** air from the clutch system.

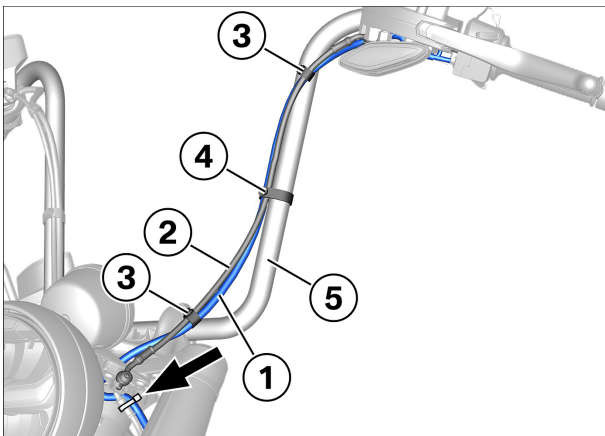


29



► **Securing wiring harness for handlebars, left**

- Connect connector (1) with turn indicator (2).

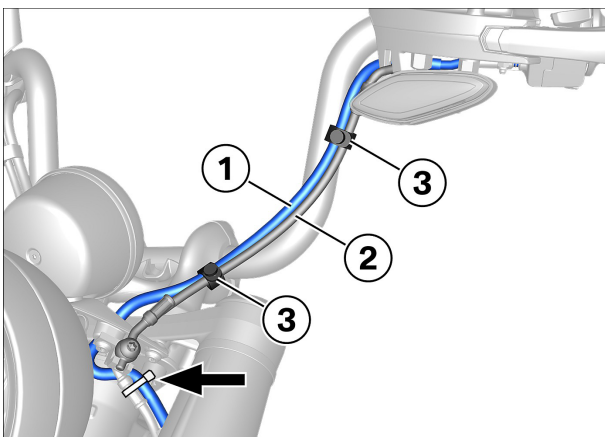


- Route wiring harness (1) on clutch line (2) and secure with short tensioning straps (3).
- Secure wiring harness (1) and clutch line (2) with long tensioning strap (4) on handlebars Apehanger 16.5" (5).

NOTICE

These instructions describe the installation of the accessory handlebars Apehanger 16" and Apehanger 6.5". Please select the corresponding variant.

- Secure the cable strap (arrow).

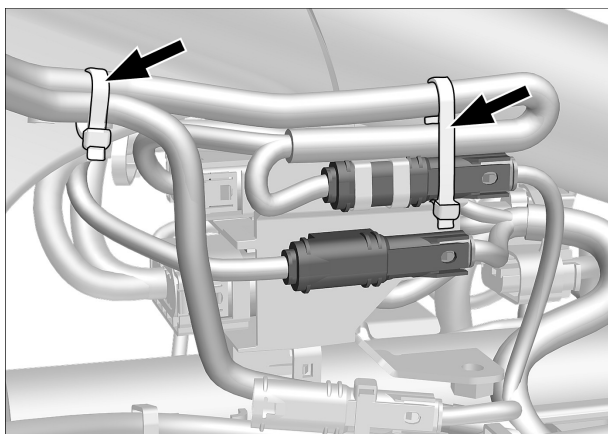


- Route wiring harness (1) on clutch line (2) and secure with short tensioning straps (3).

NOTICE

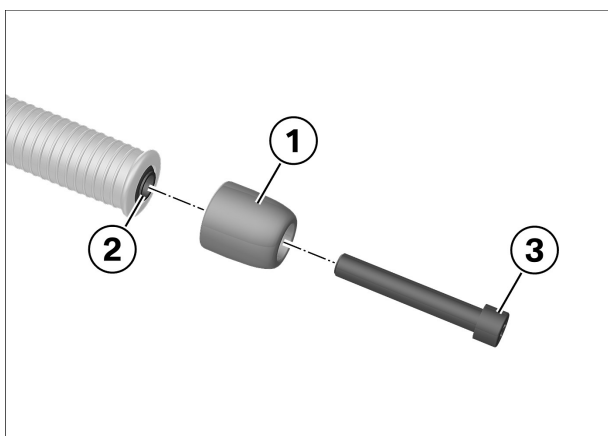
These instructions describe the installation of the accessory handlebars Apehanger 16" and Apehanger 6.5". Please select the corresponding variant.

- For handlebars Apehanger 6.5", further fastening of the clutch line (2) is not necessary.
- Secure the cable strap (arrow).



- Form excess lengths of cables into loops and secure cable straps (**arrows**).

30

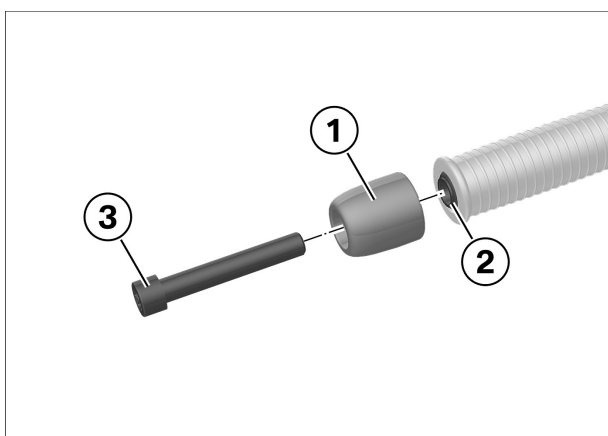


► Installing right handlebar weight

- Position handlebar weight (**1**) on handlebars (**2**).
- Install bolt (**3**).

Tightening torques		
Handlebar weight in handlebars		
M12 x 75 - 10.9, Re- new screw	66 Nm	
Thread-locking com- pound (micro-encapsu- lated)		

31

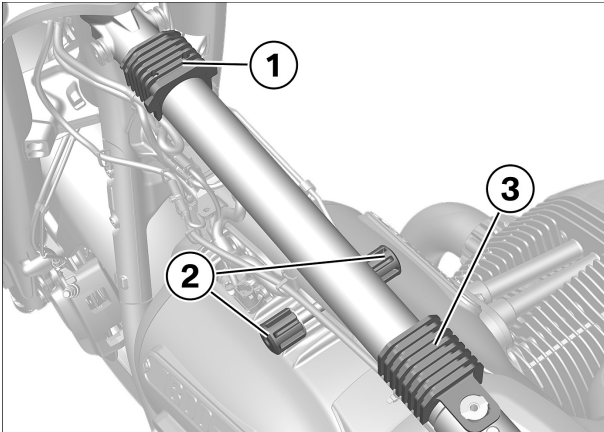


► Installing left handlebar weight

- Position handlebar weight (**1**) on handlebars (**2**).
- Install bolt (**3**).

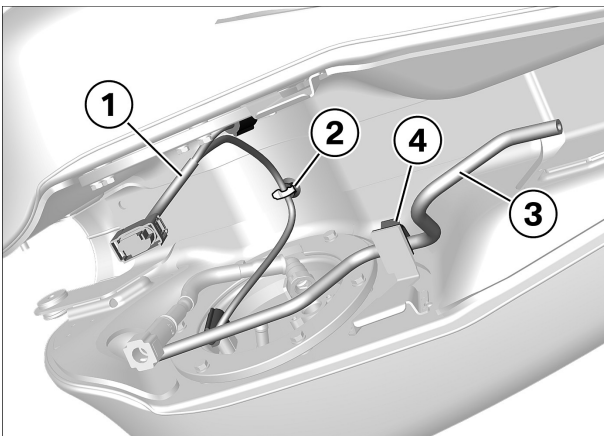
Tightening torques		
Handlebar weight in handlebars		
M12 x 75 - 10.9, Re- new screw	66 Nm	
Thread-locking com- pound (micro-encapsu- lated)		

32

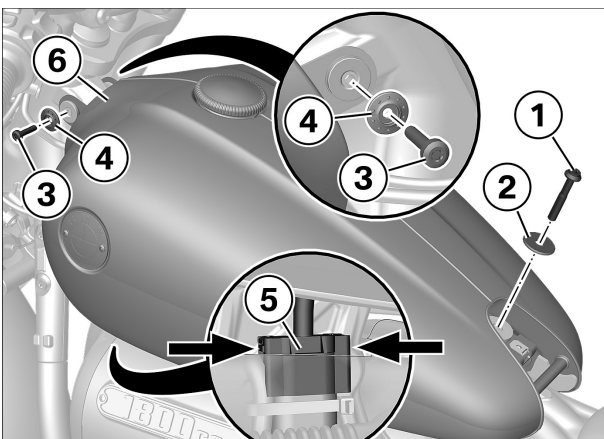


► Installing fuel tank

- If necessary, position tank supports **(1)**, **(2)** and **(3)**.



- Make sure that auxiliary cables **(1)** and cable clips **(2)** are secured.
- Make sure that drainage hose **(3)** is fastened in holder **(4)**.



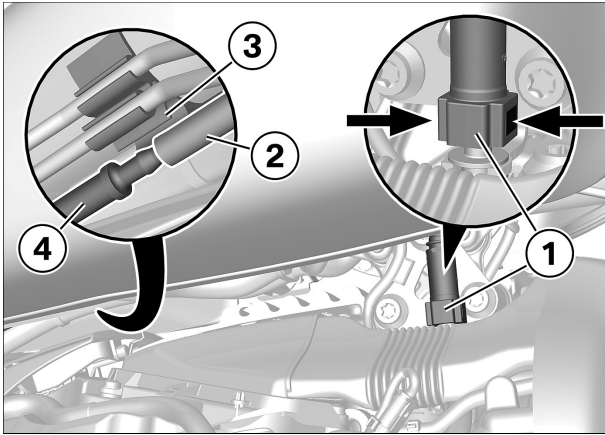
- Mount fuel tank **(6)**.
- Install screw **(1)** and contact disc **(2)**.

🔧 Tightening torques		
Fuel tank rear to frame		
M8 x 50	19 Nm	

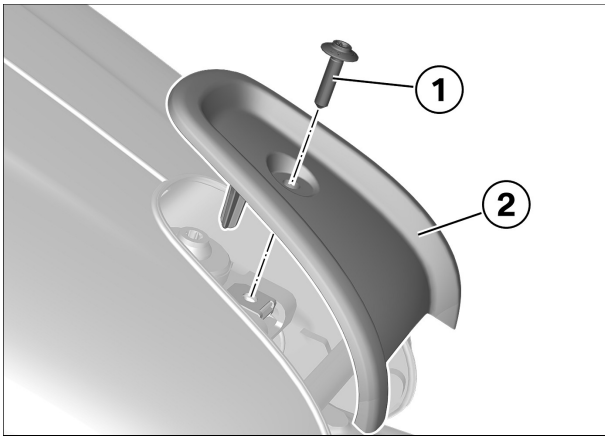
- Install screws **(3)** and washers **(4)** on left and right.

🔧 Tightening torques		
Fuel tank, front, to frame		
M6 x 25	8 Nm	

- Connect connector **(5)** of fuel-pump unit.

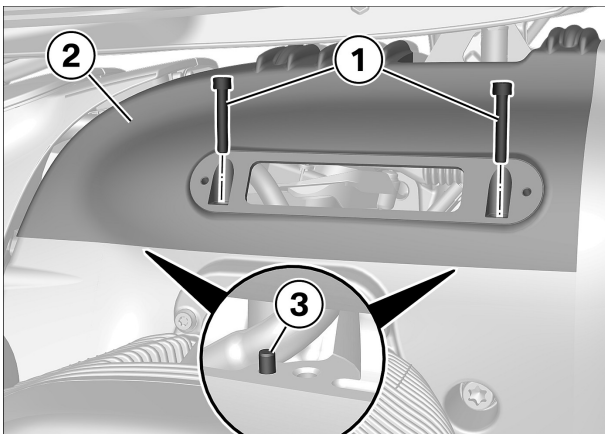


- Slide drainage hose **(2)** onto clutch **(4)** and fasten in holder **(3)**.
- Connect quick-release coupling **(1)**.



- Secure tank trim **(2)** with screw **(1)**.

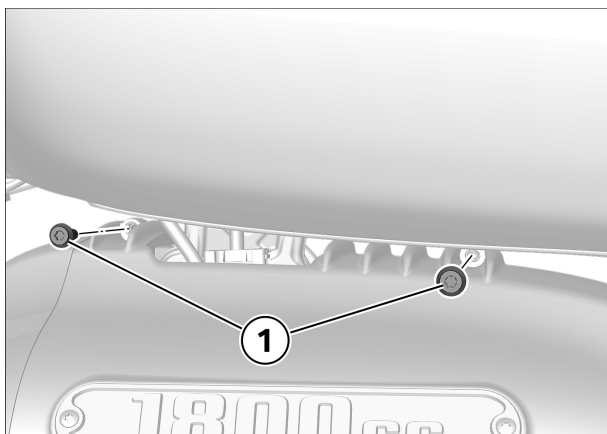
33



► Install right crankcase cover

- Position crankcase cover **(2)**, checking dowel pins **(3)**.
- Install screws **(1)**.

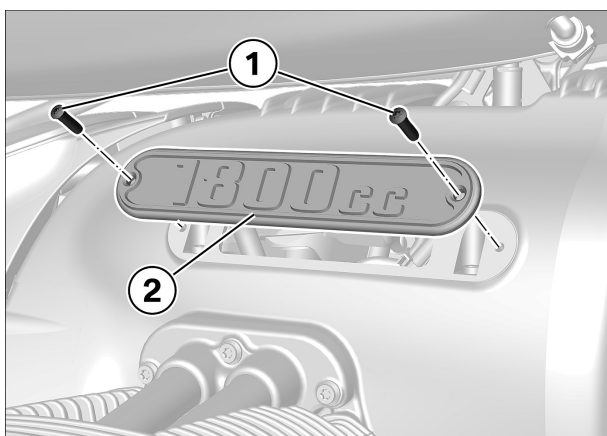
Tightening torques		
Left/right cover to crankcase		
M6 x 35	10 Nm	



- Install screws (1).

Tightening torques		
Left crankcase cover to right cover		
M5 x 14	6 Nm	

34



► Install right badge for crankcase cover

- Position badge (2) and install screws (1).

35

► 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.
- Switch on the ignition.
 - » 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.
- Pull the clutch lever.
- Operate the starter switch.
- » Starter does **not** operate.
- Retract the side stand.
- 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.

