

BMW Group - AIR: 2023-08-01 / 17:31

Dealer: 32711/06

Model: X3 M40i

Development code: G01

Model code: 83DP

Lead type: 83DP

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[Engine oil service »](#)

 **WARNING**

**Hot fluids.**

**Risk of scalding!**

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

 **WARNING**

**Hot surfaces.**

**Risk of burning!**

- Perform all work only on components that have cooled down.

 **RISK OF DAMAGE**

**Engine damage caused by excessively filling the engine with motor oil.**

**Filling an excessive quantity of motor oil may cause engine damage.**

- Observe the exact motor oil filling capacity.
- Allow engine oil to drip off when draining.

 **RISK OF DAMAGE**

**Contaminant or foreign body.**

**Contamination can result in malfunctions, loss of function or leaks.**

- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.

- Close off line connections with seal plugs.

### **i** TECHNICAL INFORMATION

Make sure the vehicle is operating temperature for engine oil service (engine oil temperature > 70 °C).

### **i** TECHNICAL INFORMATION

Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

## Preliminary work

### Removing the acoustic cover

#### **⚠** WARNING

Hot surfaces.

Risk of burning!

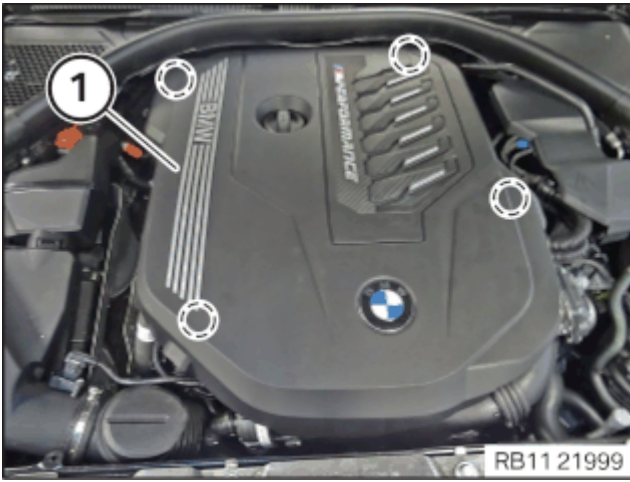
- Perform all work only on components that have cooled down.

#### **🔧** RISK OF DAMAGE

Damage to the acoustic cover / design cover.

Jerky movements during disassembly and application of excessive force during installation may result in breakage of the acoustic cover / design cover.

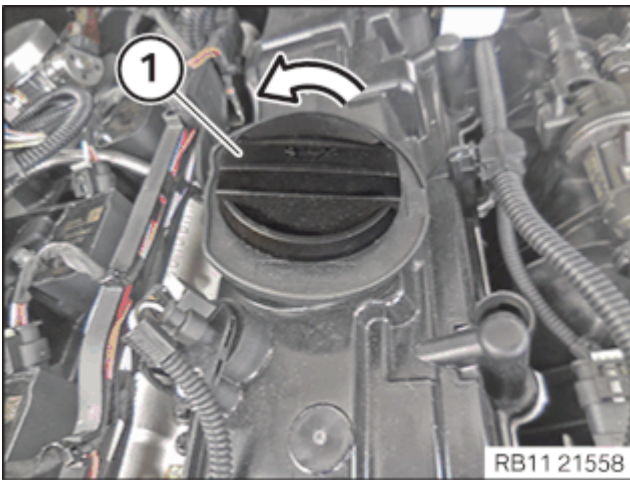
- Disassemble or mount the acoustic cover / design cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount the acoustic cover / design cover only at temperatures > 20 °C.
- Use only distilled water as an auxiliary material during installation, no lubricants.



- Release the acoustic cover (1) upwards out of the rubber mounts (markings).

## Main Works

### Removing the oil filler cap



- Open the oil filler cap (1) in the arrow direction.

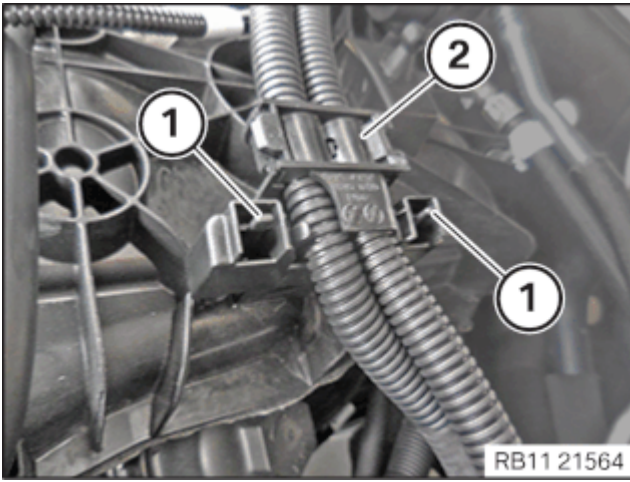
### Removing the oil filter element

#### WARNING

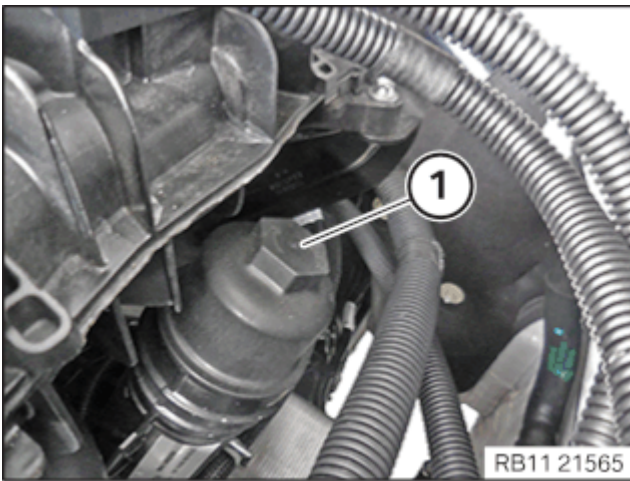
Hot surfaces.

Risk of burning!

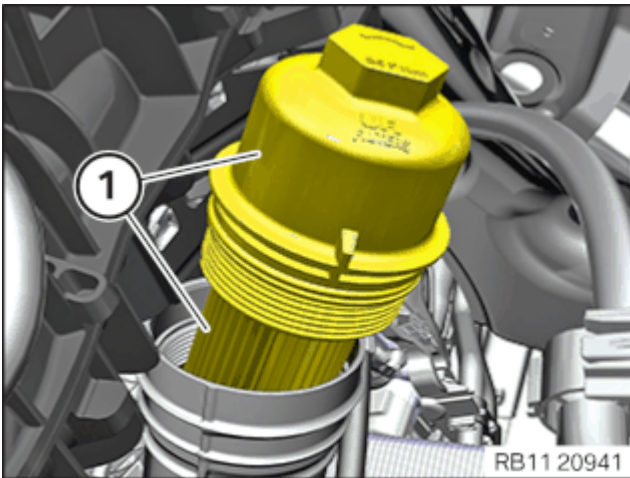
- Perform all work only on components that have cooled down.



- Unlock and loosen the locks (1).
- Thread out the wiring harness section (2) for the injectors and ignition coils and set aside.



- Release the oil filter cover (1) with standard tools.



- Feed out and remove the oil filter cover with oil filter element (1).

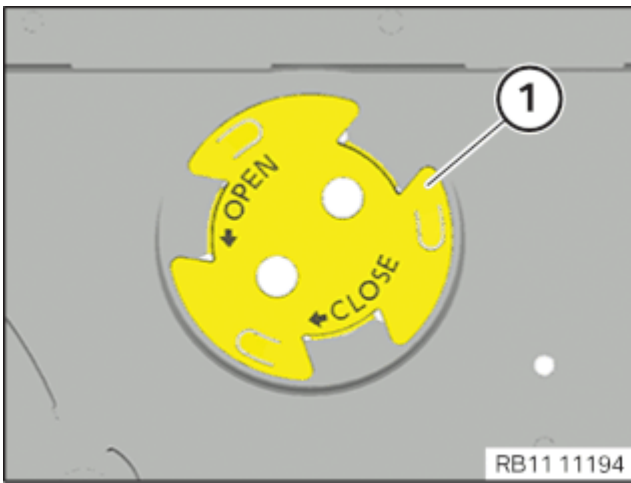
## Releasing the oil drain plug

### WARNING

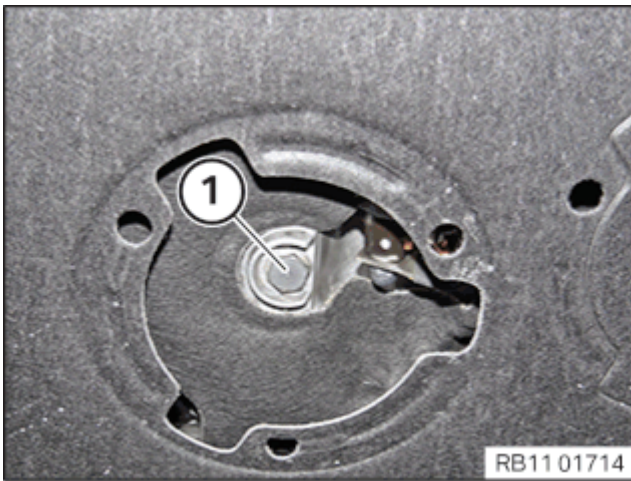
Hot fluids.

Risk of scalding!

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.



- Turn and remove service cap (1).



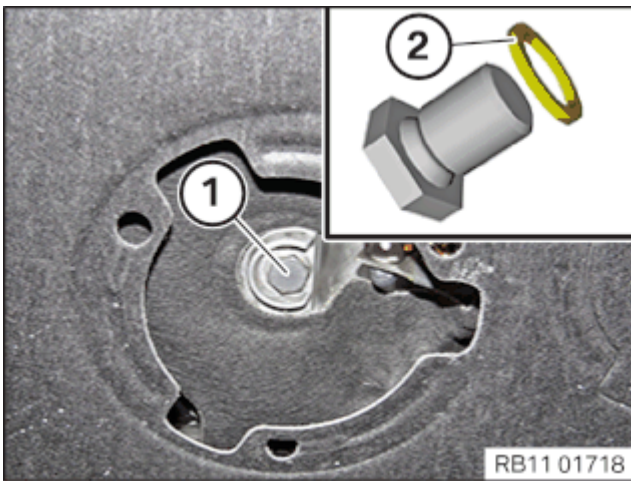
- Open oil drain plug (1) from the oil sump.

**i TECHNICAL INFORMATION**

Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

- Allow the motor oil to drain out fully.

### Tightening the oil drain plug



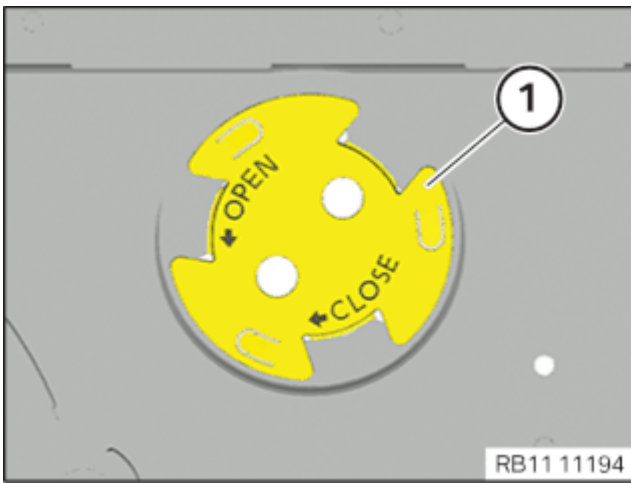
- Renew sealing ring (2).

Parts: Sealing ring

- Position oil drain plug (1) on the oil sump and tighten.

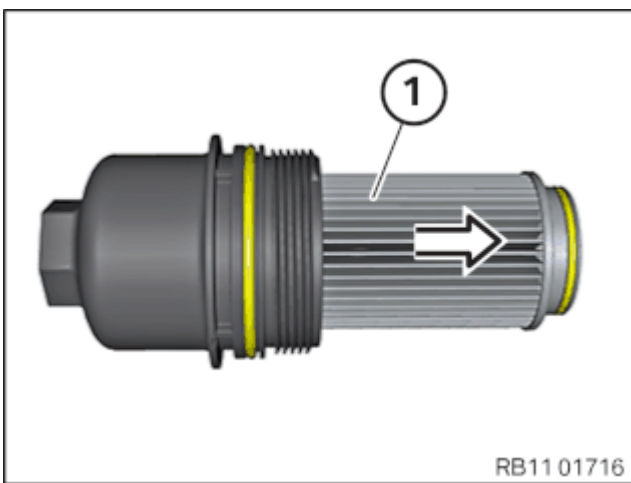
### Tightening torques

<p><b>Oil drain plug</b></p> <p>M12x16 Renew the sealing ring.</p> <p style="text-align: right;"><b>Tightening torque</b> 25Nm</p>
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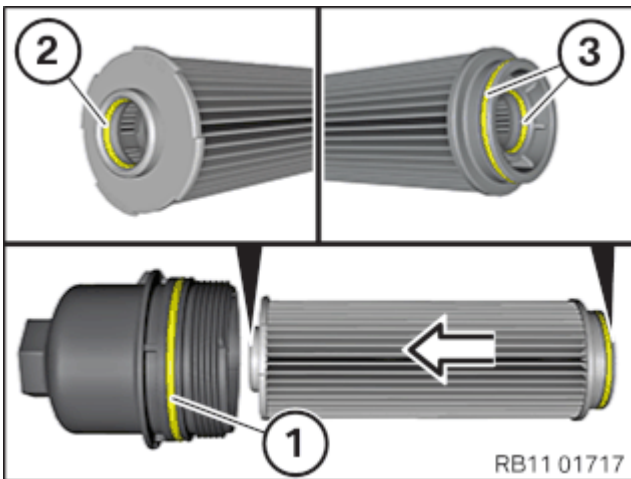


- Install service cap (1).

## Replace oil filter element



- Release the oil filter element (1) from the oil filter cover in the arrow direction.



- Renew oil filter element.

**Parts:** Oil filter element

- Renew O-ring (1) and wet with engine oil.

**Parts:** O-ring

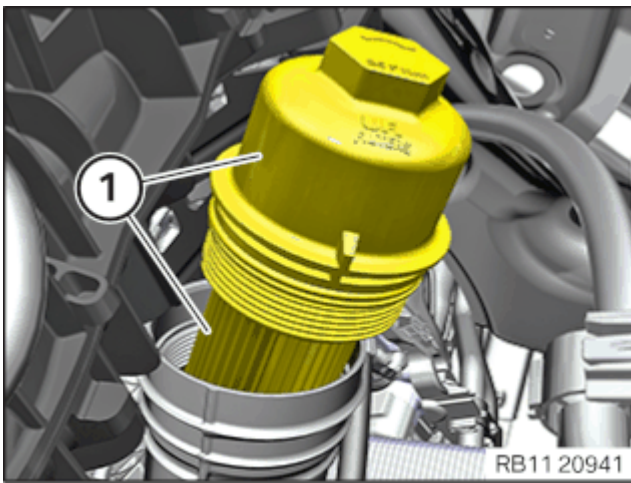
- Wet the O-ring (2) with the engine oil.

- Coat both O-rings (3) with motor oil.

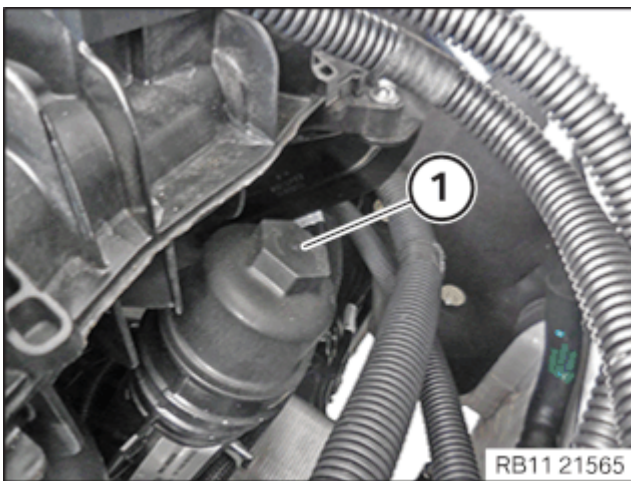
- Slide the oil filter element into the oil filter cover (1).

The oil filter element must snap audibly into place.

## Installing the oil filter element



- Feed in and install oil filter cover with the oil filter element (1).



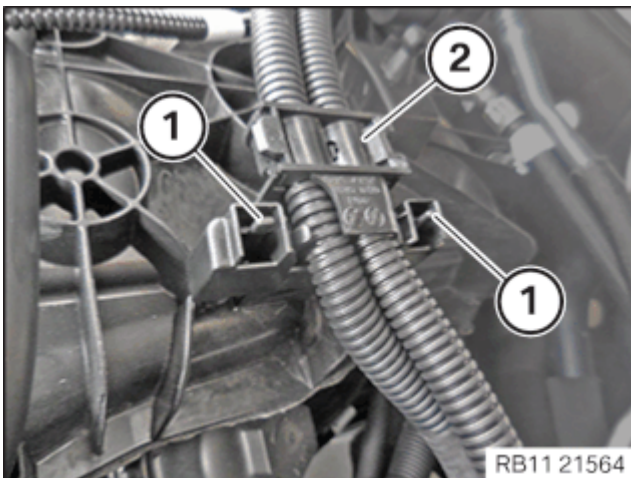
- Tighten the oil filter cover (1).

### Tightening torques

Oil filter cover to oil filter module

O-ring lightly oiled.

Tightening torque  
25Nm



- Insert and install the wiring harness section (2) for the injectors and ignition coils.
- Ensure that the locking mechanisms (1) engage audibly.

## Filling engine oil

### RISK OF DAMAGE

Damage on the petrol particulate filter.

Vehicles that are equipped with a petrol particulate filter must be operated with low-ash engine oil.

- Only use engine oils approved by BMW for the respective engine.

- For additional information see: Overview of technically suitable engine oils for BMW Group engines.



## RISK OF DAMAGE

Engine damage caused by excessively filling the engine with motor oil.  
Filling an excessive quantity of motor oil may cause engine damage.

- Observe the exact motor oil filling capacity.
- Allow engine oil to drip off when draining.

- Pour in engine oil.

### Technical data

#### Motor oil B58B30M1/B58B30O1

Filling capacity, engine  
oil change with oil filter  
element,  
B58B30M1 rear-wheel  
drive

6.50 l

Filling capacity, engine  
oil change with oil filter  
element,  
B58B30M1 all-wheel  
drive

6.50 l

Filling capacity, engine  
oil change with oil filter  
element,  
B58B30O1 rear-wheel  
drive

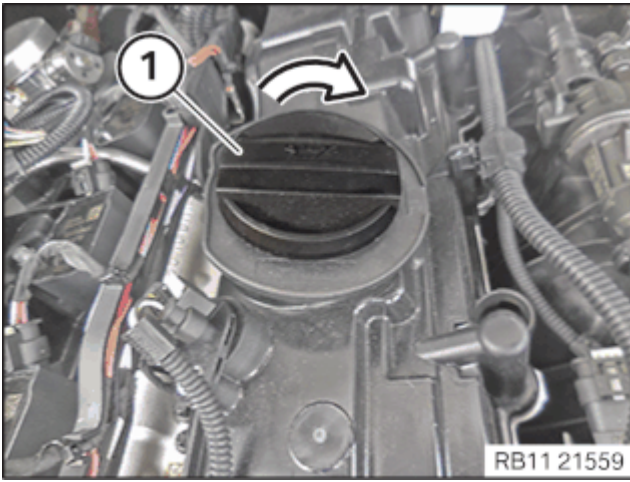
6.50 l

Filling capacity, engine  
oil change with oil filter  
element,  
B58B30O1 all-wheel  
drive

7.20 l

Opening the oil filler cap





- Close the oil filler cap (1) in the arrow direction.
- Make sure the oil filler cap (1) engages audibly.

## Recommendation: Carrying out an electronic oil measurement

### Precondition

Vehicle in horizontal position.

#### **i** TECHNICAL INFORMATION

Please comply with instructions in Owner's Manual.

- Carry out an electronic oil measurement.
- Top up motor oil if necessary.

## Follow-up works

### Installing acoustic cover

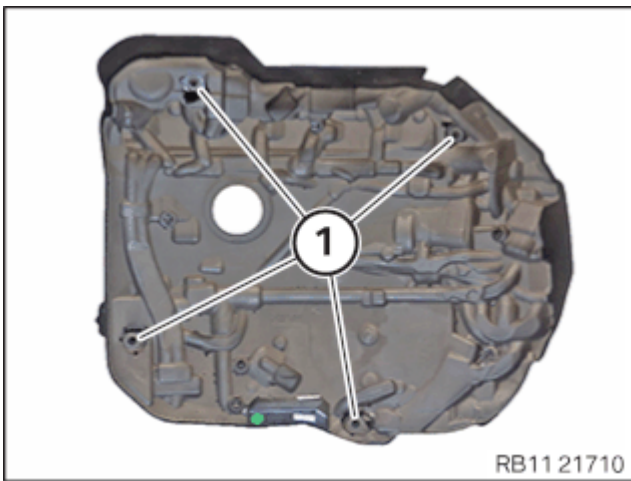


#### RISK OF DAMAGE

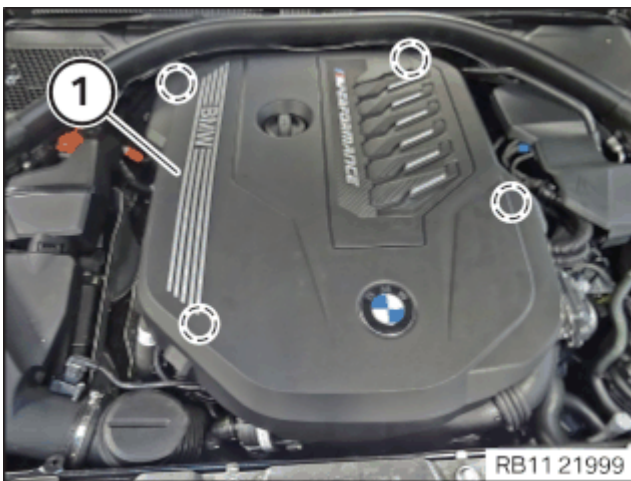
Damage to the acoustic cover / design cover.

Jerky movements during disassembly and application of excessive force during installation may result in breakage of the acoustic cover / design cover.

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- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount the acoustic cover / design cover only at temperatures  $> 20\text{ }^{\circ}\text{C}$ .
- Use only distilled water as an auxiliary material during installation, no lubricants.



- Check that rubber mount (1) fits correctly in acoustic cover.



- Install acoustic cover (1) and attach it in the rubber mounts (marks).

## Perform the CBS reset

### Precondition

Maintenance work is performed.

On-board date is set correctly.

No CC message is present.

Remaining distance or remaining service life of the service interval is below 90%.

### **i** TECHNICAL INFORMATION

The CBS maintenance work can be reset in the car. In general, however, the reset of CBS functions (CBS reset) with the diagnostic system is recommended.

It is only possible to code the country-specific statutory intervals with the diagnostic system.

### **i** TECHNICAL INFORMATION

## Information for the occurrence of a failed CBS reset:

For front/rear brake service:

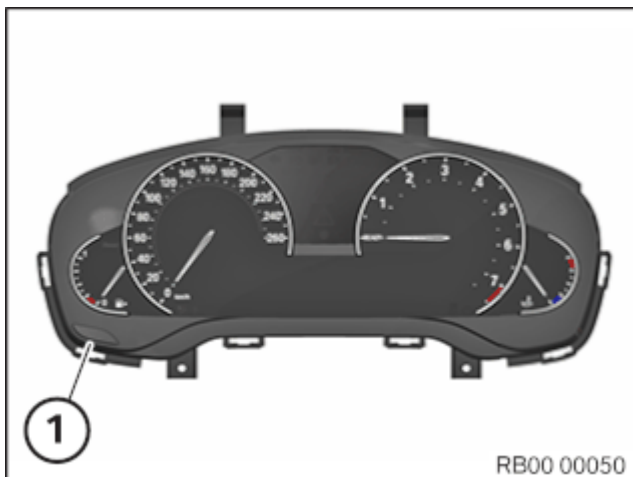
- A CBS reset is possible in the vehicle only with a sanded brake pad wear sensor (CBS display in the CID, active).
- In case of a brake pad wear sensor that is not sanded, (no CBS display in the CID) a CBS reset is possible only with the diagnostic system.

Other known causes of CBS reset problems:

- Parking brake applied.
- Brake pedal applied.
- Automatic Hold function activated.

## **i** TECHNICAL INFORMATION

The reset procedure (CBS reset) is canceled due to a timeout or a terminal change.



- **Equipment specification with the reset button for the trip odometer in the instrument cluster (KOMBI)**

Generate PWF status "Residing".

Generate PWF status "PAD": For this purpose, press the START-STOP button three times.

Press trip distance recorder reset button (1) for approx. 10 s, until the 1st maintenance work appears on the display.

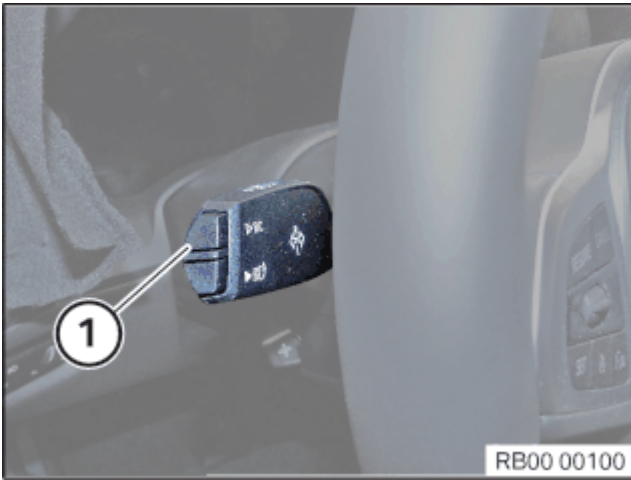
The next position is reached by briefly pressing the trip distance recorder reset button (1) again.

Select the desired service job.

If a CBS reset is possible, "Reset possible" is displayed in the instrument cluster (KOMBI).

Confirm the "Perform reset?" text message. In addition, press the trip distance recorder reset button (1) for 3 s.

The CBS reset is confirmed as "Reset successful" after completion.



- Equipment specification without the reset button for the trip odometer in the instrument cluster (KOMBI)

Generate PWF status "Residing".

Generate PWF status "PAD": For this purpose, press the START-STOP button three times.

Press on-board computer button on the turn signal/high beam lever (1) for approx. 10 s, until the 1st maintenance work appears on the display.

The next position is reached by briefly pressing the on-board computer button on the turn signal/high beam lever (1) again.

Select the desired service job.

If a CBS reset is possible, "Reset possible" is displayed in the instrument cluster (KOMBI).

Confirm the "Perform reset?" text message. Press the onboard computer button on the turn signal/high beam lever for (1) 3 s.

The CBS reset is confirmed as "Reset successful" after completion.

## Renew battery of the remote control key(s)

- Renew the battery of the remote control key(s).

**Parts:** Battery of the radio remote control(s)

### ► In case of shorter oil service intervals: Renew battery of the remote control key(s)

#### **i** TECHNICAL INFORMATION

For vehicles with shortened oil change interval SA8KM, SA8KL and SA8KP: the batteries of all radio remote control(s) must be renewed at every 2nd engine oil service.

- Renew the battery of the radio remote control(s) at every second engine oil service.

**Parts:** Battery of the radio remote control

