

34 00 010 Change brake fluid in entire system

+ 34 00 504

Preparatory work

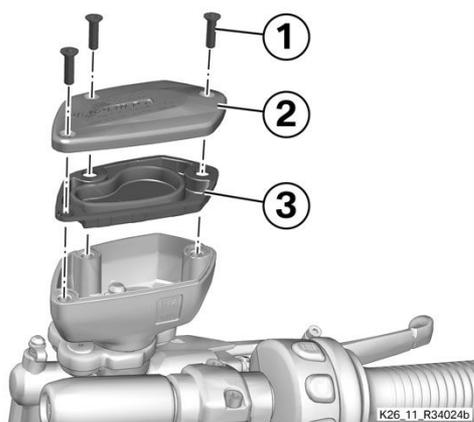
Removing seat

Core activity

(-) Changing brake fluid, front, and bleeding brake system

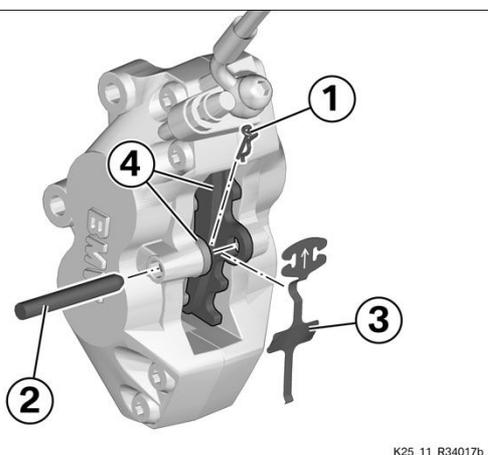
NOTICE

This description applies for brake filling and bleeding units with vacuum extraction. If other devices are used, comply with the manufacturer's instructions.



- Set the brake lever to maximum span.
- Remove and clean the following components:
 - Screws (1)
 - Reservoir cap (2)
 - Diaphragm (3)
- Draw off the brake fluid.

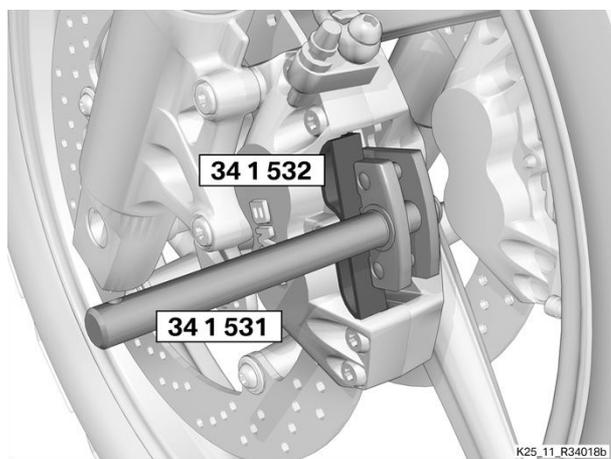
► Removing front brake pads



- Remove retainer (1) and pin (2).
- Remove spring (3).
- Remove brake pads (4).



- Install piston resetting device (No. 34 1 531) and locator (No. 34 1 532) in the **left and right** brake calipers.
- Use the piston resetting device and locators to force the pistons in the left and right brake calipers all the way back and hold them in this position.
- Draw off the excess brake fluid and clean the reservoir.



- Turn the handlebars to a position in which the brake fluid reservoir 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

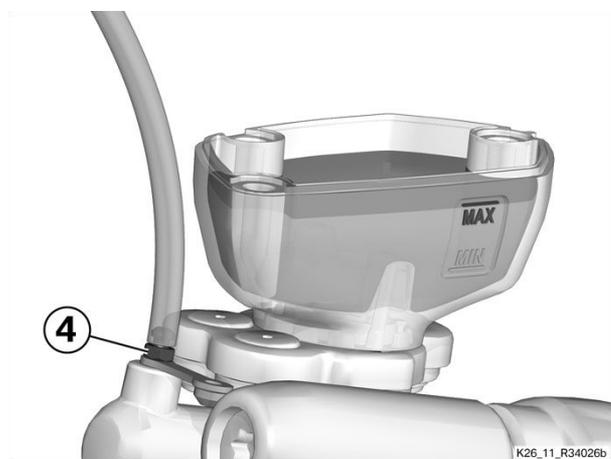
- Connect the brake bleeding device to bleed screw (4) in the handbrake cylinder.
- Slightly open the bleed screw.
- Continue bleeding the brake system until the fresh brake fluid emerges clear and free from bubbles.
- Close bleed screw (4).



Tightening torques

Bleed screw on handbrake fitting

M5	5 Nm
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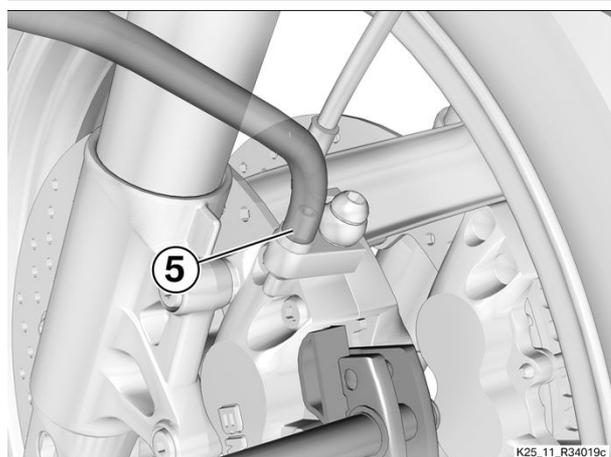
- Connect the brake bleeding device to bleed screw (5) in the left brake caliper.
- Slightly open bleed screw (5).
- Continue bleeding the brake system until fresh brake fluid emerges.

⚠ WARNING

Air bubbles difficult to recognise in brake fluid drawn off by vacuum extraction

Braking power is reduced due to insufficient brake system bleeding.

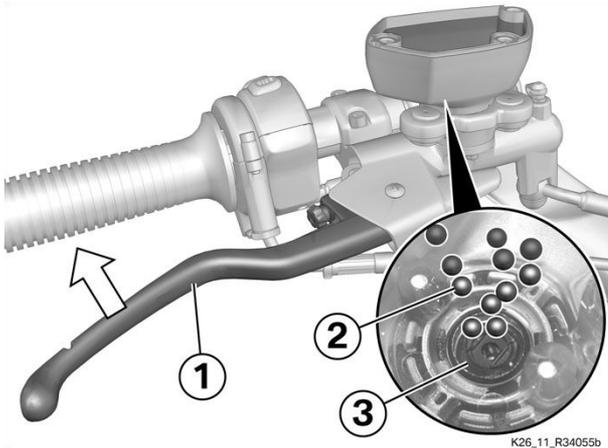
- In the final step, bleed the system manually (without vacuum extraction) until the fluid emerging is bubble-free.



- Close bleed screw (5) of the left brake caliper.

 Tightening torques		
Bleed screw, brake caliper, front		
	10 Nm	

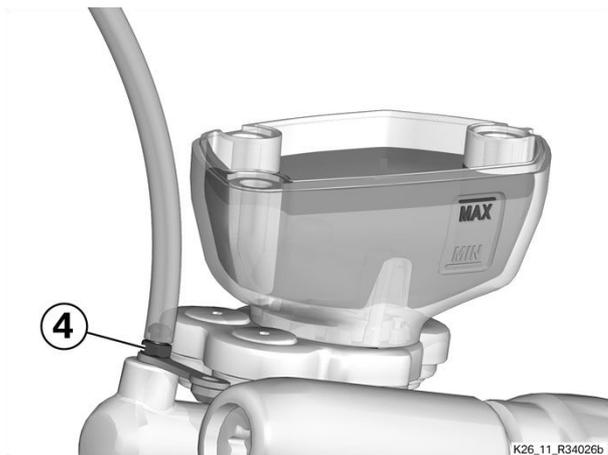
- Repeat the fluid-change procedure/procedure for bleeding the brakes at the right brake caliper.
- Turn the handlebars to a position in which air can rise to the equalising bore.
- Repeatedly short-pull brake lever (1) to expel air from the brake system.
- » Air bubbles (2) cease to escape from equalising bore (3).
- » There is a **clearly perceptible pressure point**.



K26_11_R34055b

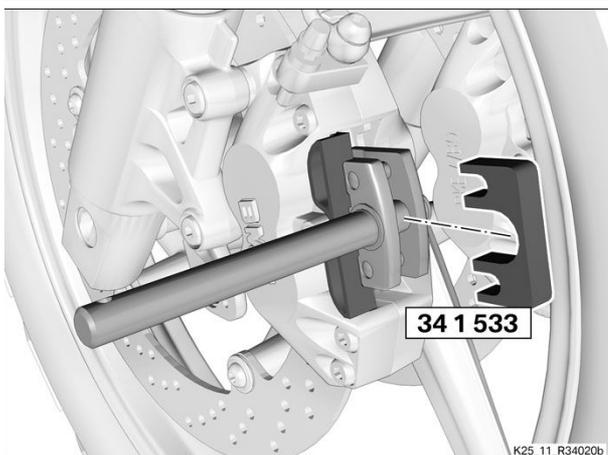
- **Again** connect the brake bleeding device to bleed screw (4) in the handbrake cylinder.
- Slightly open the bleed screw.
- Continue bleeding the brake system until the fresh brake fluid emerges clear and free from bubbles.
- Close bleed screw (4).

 Tightening torques		
Bleed screw on handbrake fitting		
M5	5 Nm	



K26_11_R34026b

- Install adapters 22 (No. 34 1 533) in the piston resetting device on left and right and **fully compress** the piston resetting device.
- Pull the handbrake lever until the brake pistons are in contact with the piston resetting device.
- » This simulates the thickness of new brake pads and brake discs.



K25_11_R34020b

- Turn the handlebars to a position in which the brake fluid reservoir is horizontal.
- Top up with fresh brake fluid to the MAX mark (arrow).

	Hydraulic fluid
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Brake fluid, DOT4



K26_11_R34025b

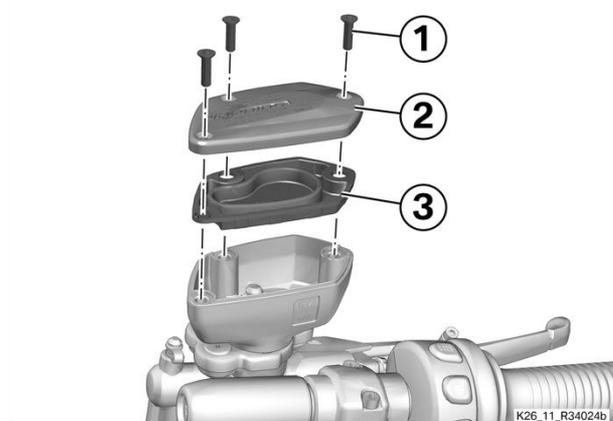
- Remove the piston resetting device and locators left and right from the brake calipers.

⚠ WARNING

Use of an aftermarket reservoir cap.

Brake failure

- Use only OEM reservoir caps with built-in suppressor weight.



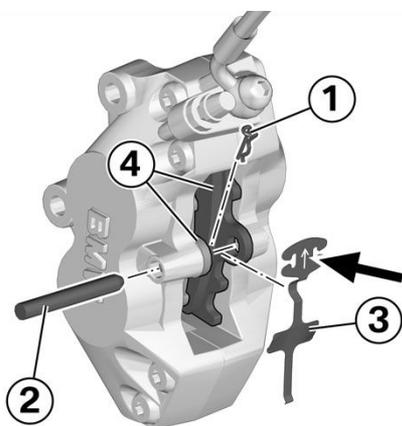
K26_11_R34024b

- Wipe the rim of the reservoir, diaphragm (3) and reservoir cap (2) to remove brake fluid and carefully reassemble the components.

- Install screws (1).

► Install the front brake pads

- Install brake pads (4).
- Install spring (3) with the arrow (arrow) pointing in the forward direction of travel.
- Install pin (2).
- Install retainer (1).



K25_11_R34017c

► Bedding in brake pads

⚠ WARNING

Brake pads not lying against the brake disc

Risk of accident due to delayed braking effect.

- Before driving, check that the brakes respond without delay.

- Operate the brake several times until the brake pads are bedded.

Check

- Check brake pressure by operating the brakes.

Result:

- Low brake pressure

Measure:

- Repeat the brake bleeding procedure **without removing the brake pads**.
- On completion of all work place the vehicle on its side stand and repeatedly short-pull the brake lever to expel the residual air from the handbrake cylinder.

(-) Changing brake fluid, rear, and bleeding brake system

NOTICE

This description applies for brake filling and bleeding units with vacuum extraction. If other devices are used, comply with the manufacturer's instructions.

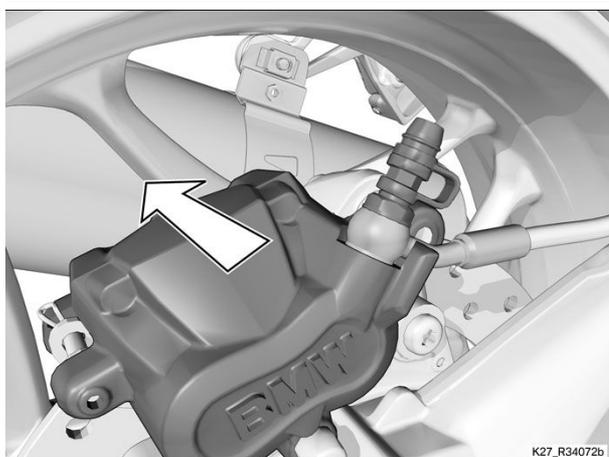


ATTENTION

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.
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- Remove reservoir cap with diaphragm.
 - Draw off the brake fluid from the reservoir and clean the reservoir.
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- Press the brake caliper against the brake disc in order to force the pistons back.

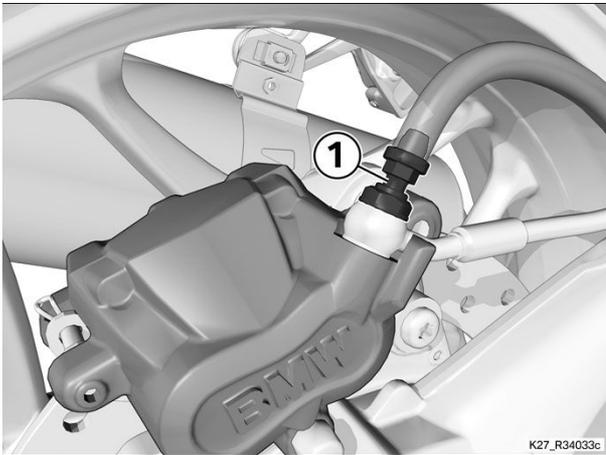
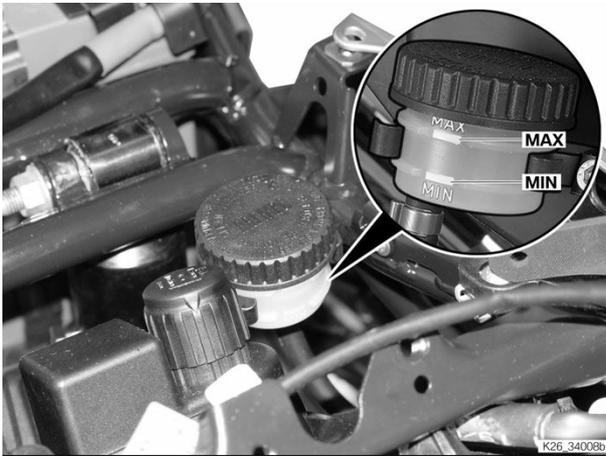


WARNING

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.
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- Top up with fresh brake fluid to the (MAX) mark.



Hydraulic fluid

Brake fluid, DOT4

- Connect the brake bleeding device.
- Slightly open bleed screw (1).
- Continue bleeding the brake system until fresh brake fluid emerges.

⚠ WARNING

Air bubbles difficult to recognise in brake fluid drawn off by vacuum extraction

Braking power is reduced due to insufficient brake system bleeding.

- In the final step, bleed the system manually (without vacuum extraction) until the fluid emerging is bubble-free.

- Close bleed screw (1) and remove the brake bleeding device.



Tightening torques

Brake caliper, rear, bleed screw

	5 Nm	
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- Top up the brake fluid level to the (MAX) mark.
- Wipe the rim of the reservoir, the diaphragm and the cap to remove brake fluid, and carefully re-assemble the components.

- Operate the brake several times until the brake pads are bedded.

Check

- Check brake pressure by operating the brakes.

Result:

- Low brake pressure

Measure:

- Repeat the brake-bleeding process.

Follow-up work

Installing seat

Final check of work performed