

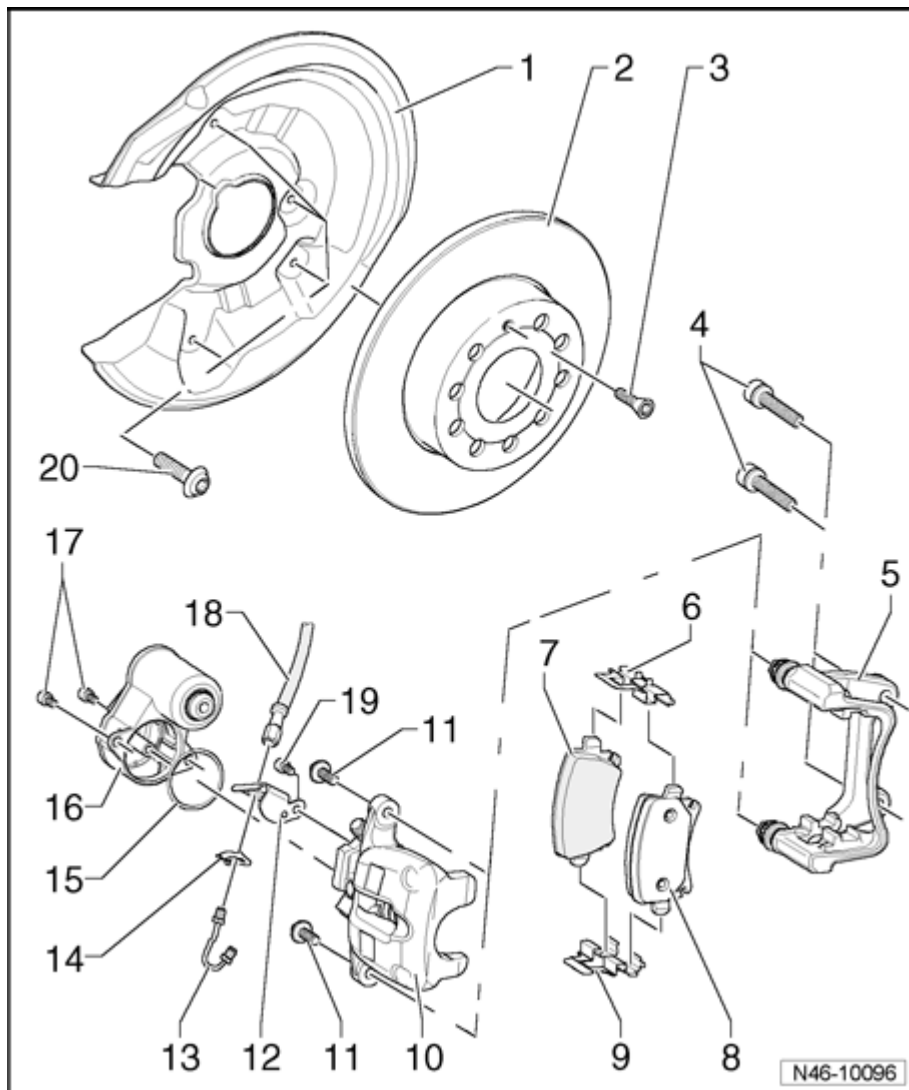


## Rear wheel brakes, servicing

### Rear wheel brakes CII 38 and CII 41, servicing

#### Note:

- Use brake filler/bleeder unit VAS 5234 to extract brake fluid from brake fluid reservoir.
- Before removing brake caliper or disconnecting brake hose, brake pedal actuator V.A.G 1869/2 must be inserted (this dissipates pressure).



#### ■ Cover plate

- Allocation Electronic parts catalog (ETKA)

- **Brake disc**
  - 16 inch: dia. 286 mm
  - 17 inch: dia. 310 mm
  - Thickness 16 inch: 12 mm
  - Thickness 17 inch: 22 mm
  - Wear limit 16 inch: 10 mm
  - Wear limit 17 inch: 20 mm
  - Always replace pads on both sides of axle if worn.
  - To remove, first remove brake caliper and carrier
  
- **Inner Torx bolt, 4 Nm**
  
- **Multi-point socket head bolt, 90 Nm plus an additional 90 ° (1/4 turn)**
  - Always replace after removal
  
- **Brake carrier with guide pins and protective cap**
  - Supplied as pre-assembled replacement part with sufficient grease on guide pins
  - If protective caps or guide pins are damaged, install repair kit. Use supplied grease packet to lubricate guide pins
  
- **Anti-rattle spring**
  - Always replace when pads are replaced
  
- **Brake pads**
  - Thickness: 11 mm without backing plate

- Wear limit: 2 mm without backing plate
- Checking thickness  
⇒ ⇒ [Repair Manual, Maintenance](#)
- Must always be replaced together on both sides of axle
- Removing and installing ⇒ [46-2, Brake pads, removing and installing](#)
  
- **Brake pads**
  - Thickness: 11 mm without backing plate
  - Wear limit: 2 mm without backing plate
  - Checking thickness  
⇒ ⇒ [Repair Manual, Maintenance](#)
  - Must always be replaced together on both sides of axle
  - Removing and installing ⇒ [46-2, Brake pads, removing and installing](#)
  
- **Anti-rattle spring**
  - Always replace when pads are replaced
  
- **Brake caliper**
  - Do not unscrew brake hose when replacing brake pad
  - Removing and installing ⇒ [46-2, Brake caliper, removing and installing](#)
  - Servicing ⇒ [47-2, Rear brake caliper, servicing](#)
  - After installing or replacing, a

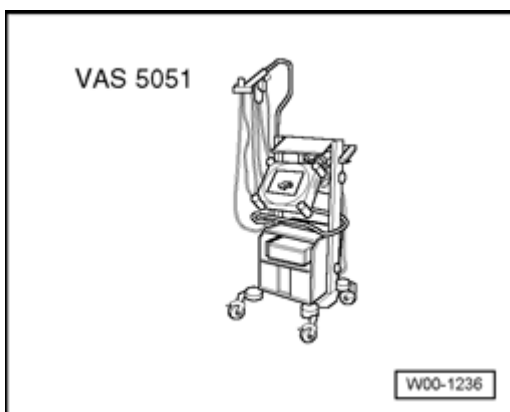
basic setting must be performed.

- **Hex bolt, self-locking, 35 Nm**
  - Replace
  
- **Bracket**
- **Brake line, 14 Nm**
- **Retaining clip**
- **Sealing ring**
- **Parking brake motor**
- **Inner Torx bolt, 12 Nm**
- **Brake hose**
- **Inner Torx bolt, 12 Nm**

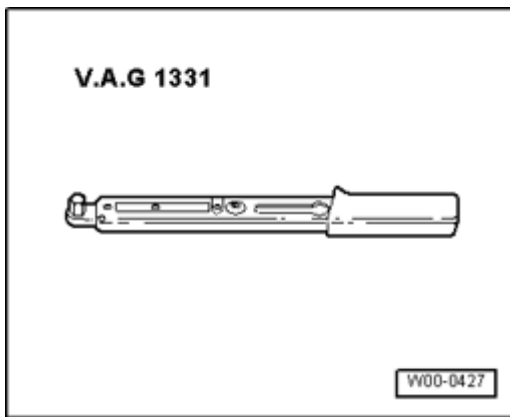
### **Brake pads, removing and installing**

#### **Special tools, testers and auxiliary items required**

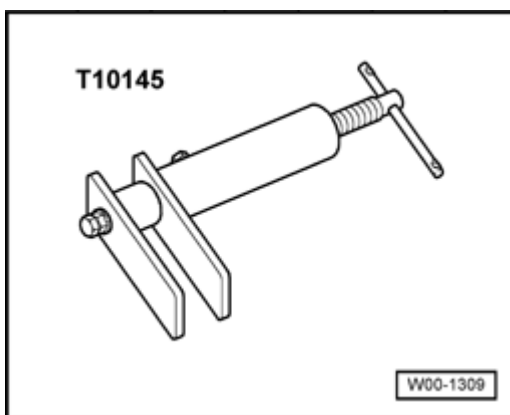
- Vehicle diagnostic, test and information system VAS 5051



- Diagnostic cable VAS 5051/1 or VAS 5051/3



- Torque wrench V.A.G 1331



- Piston resetting tool T10145

### Removing

**When removing, mark brake pads that will be used again. Install in the same position, otherwise braking effect will be uneven!**

#### **Note:**

- *Do not disconnect the connectors from the parking brake motors.*
- Parking brake not actuated.

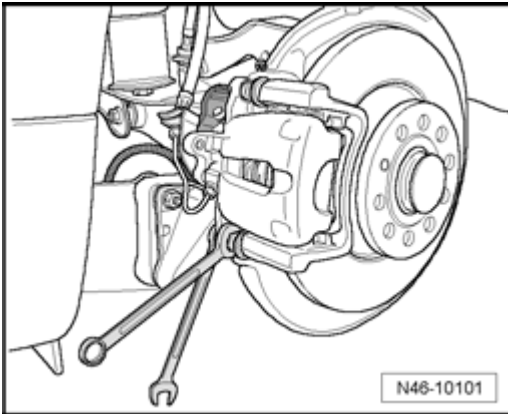
- Remove wheels.

The pistons of the parking brake must be driven back using VAS 5051 .

**Before pressing piston back, draw off brake fluid from reservoir using a bleeder bottle. Otherwise, especially if reservoir has been topped off, fluid will overflow and**

**cause damage.**

- VAS 5051 , connecting and selecting functions ⇒ [45-3, VAS 5051 connecting and selecting functions](#) .
- Select electro-mechanical parking brake and function "Moving piston of parking brake motor out and in" .
- Drive pistons back using VAS 5051 .



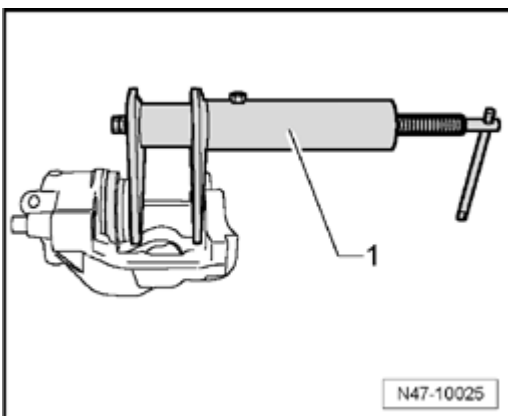
- Then, remove bolts from brake caliper, while counter-holding guide pins.
- Remove brake caliper downward from brake carrier.

**Note:**

- *Resetting the piston with VAS 5051 is often not sufficient but necessary! The pressure nut in the piston is mounted floating, therefore the piston can only be pressed and not pulled back. Only the spindle with the pressure nut is moved back.*

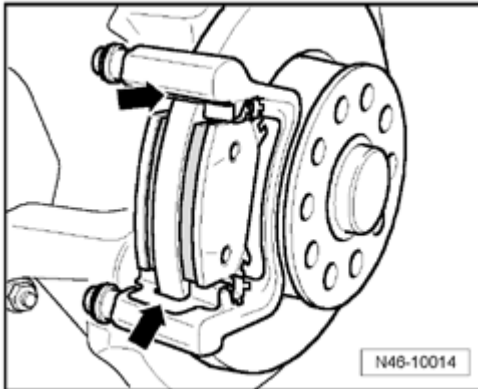
**Caution!**

**The piston must first be reset with VAS 5051 .**



- Press piston all the way back with Piston Resetting Tool T10145 .

- Secure brake caliper with wire so weight of caliper does not load or damage brake line.



- Remove brake pads and anti-rattle springs - **arrows** - .

### Cleaning:

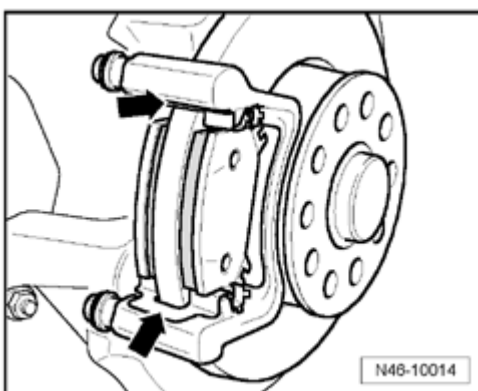
#### **Warning!**

***Do not blow brake system using compressed air, the dust produced is harmful to your health!***

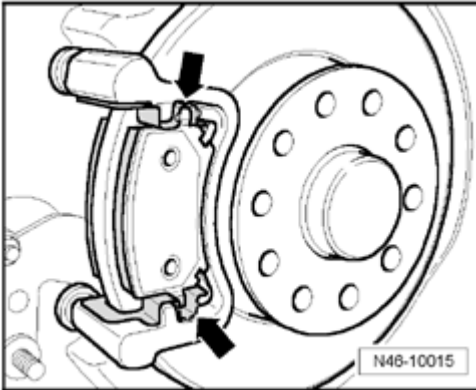
- Thoroughly clean contact surfaces for brake pads at brake carrier, remove corrosion.
- Clean brake caliper.

**Use only appropriate solvents for cleaning brake caliper.**

### Installing



- Insert brake pad retention plates - **arrows** - and brake pads in brake carrier.



- Make sure that the brake pads are located correctly in the anti-rattle springs - **arrows** - .
- Secure brake caliper using new self-locking bolts.
  - The repair kit includes four self-locking hex bolts which must be installed in all cases.

After driving pistons out using VAS 5051 , a basic setting of brake system must be performed.

- Perform basic setting of the brake system using VAS 5051 .
- Install wheels.

Torque specification for wheel bolts

⇒ *Repair Manual, Suspension, Wheels, Steering, Repair Group 44,*

.

**Note:**

- *Check brake fluid level after replacing brake pad.*

Tightening torque:

Hex bolt, brake caliper to brake carrier

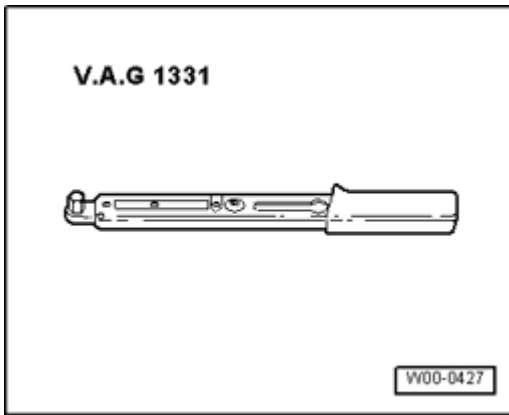
35 Nm

- Use new bolts!

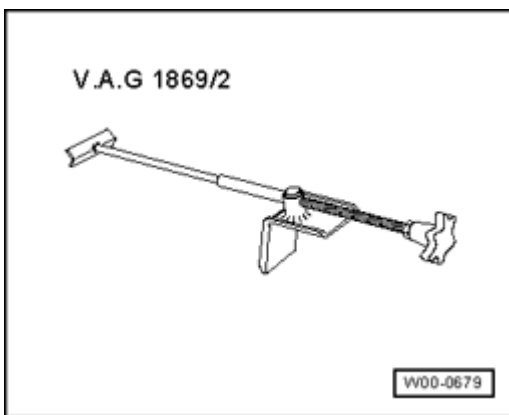
**Brake caliper, removing and installing**

**Special tools, testers and auxiliary items required**

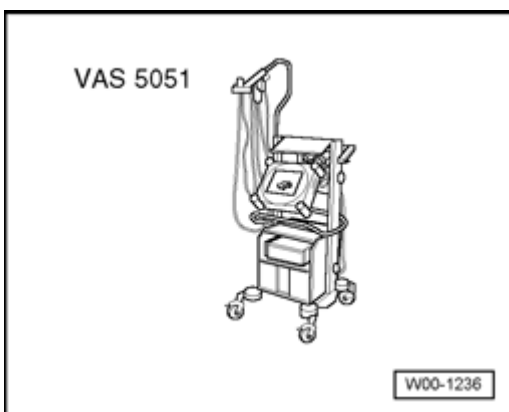




- Torque wrench V.A.G 1331



- Brake pedal actuator V.A.G 1869/2
- Vehicle diagnostic, test and information system VAS 5051



- Diagnostic cable VAS 5051/1 or VAS 5051/3

## Removing

**Work procedure applies only for replacing or when**

**performing subsequent service work on brake caliper.****Note:**

- *Do not disconnect the connectors from the parking brake motors.*

- Remove wheels.

The pistons of the parking brake must be driven back using VAS 5051 .

**Before pressing piston back, draw off brake fluid from reservoir using a bleeder bottle. Otherwise, especially if reservoir has been topped off, fluid will overflow and cause damage.**

- VAS 5051 , connecting and selecting functions ⇒ [45-3, VAS 5051 connecting and selecting functions](#) .

- Select electro-mechanical parking brake and function "Moving piston of parking brake motor out and in" .

- Drive pistons back using VAS 5051 .

- Remove parking brake motor, without disconnecting connector.

- Connect bleeder hose of bleeder bottle to bleeder valve of brake caliper and then open bleeder valve.

- Insert brake pedal actuator V.A.G 1869/2 .

- Close bleeder valve and remove bleeder bottle.

- Remove brake line from brake hose and brake caliper.

- Remove both mounting bolts from brake caliper, when doing this, counterhold on guide pin.

- Pull off brake caliper from brake carrier.

**Installing**

- Brake pads sit in retaining springs on brake carrier.

- Secure brake caliper on brake carrier using new self-locking bolts.

**Ring groove and contact surface of parking brake motor must be clean.**

- Install new seal.

- Turn spindle back slightly with help of a Torx insert T45, until parking brake motor can be correctly positioned.
- Carefully set parking brake motor in place, paying attention to the seat of the seal.
- Rotate parking brake motor so far until bolt hole and threads are aligned.

**Make sure that the parking brake motor is seated flush against the brake caliper. Do not, under any circumstances, pull the parking brake motor against the brake caliper using the bolts.**

- Set Torx bolts in place by hand and then tighten.
- Install brake line on brake caliper.
- Bleed braking system ⇒ [47-4, Brake system, bleeding](#)

After driving pistons out using VAS 5051 , a basic setting of brake system must be performed.

- Perform basic setting of brake system using VAS 5051 .
- Install wheels.

Torque specification for wheel bolts

⇒ *Repair Manual, Suspension, Wheels, Steering, Repair Group 44,*

.

**Note:**

- *Check brake fluid level.*

Tightening torques:	
Hex bolt, brake caliper to brake carrier	35 Nm
<ul style="list-style-type: none"> <li>■ Use new bolts!</li> </ul>	
Brake line to brake caliper	14 Nm
Parking brake motor to brake caliper	12 Nm