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## WM 470107 Bleeding the brake system

### Notes



#### Information

- *Observe brake-fluid quality! Use only new DOT 4 brake fluid!*
- *The Super DOT 4 brake fluid must be changed every two years!*
- *This brake fluid is available under the following part numbers: Container quantity 1 litre = 000.043.203.66  
Container quantity 30 litres = 000.043.203.67*

### Bleeding the brake system

#### Procedure for bleeding

1st. Step: Bleed brakes in the normal way (in combination with bleeding device at the brake fluid reservoir and 2.0 bar pressure) (primary circuit).

2nd. Step: In addition, use the Piwis Tester to bleed the brakes (secondary circuit). Only necessary if the hydraulic unit has been replaced and, after bleeding in the normal way (primary circuit), the brake pedal travel is excessive.

#### 1. Step: Bleeding (primary circuit)



#### Information

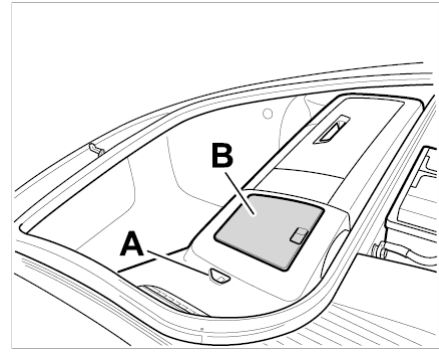
- *Always bleed both bleeder valves on brake caliper!*
- *Bleed the outer bleeder valve first!*



#### Information

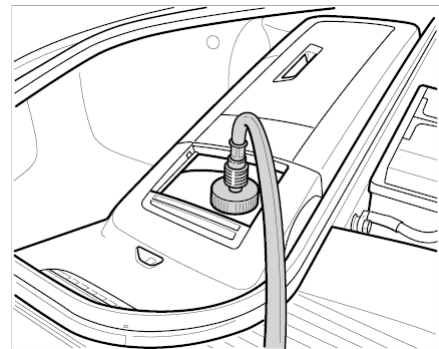
- *If the pedal travel is too long or the pedal feels too soft when applied, carry out bleeding again. Operate (pump) the brake pedal at the same time. A second person is required for this.*
- *Also carry out this procedure if the brake hydraulic system was largely empty.*

1. Disengage and remove cover over brake fluid reservoir **-B-** .



*Cover over brake fluid reservoir*

2. Open expansion tank.
3. Connect a bleeding device to the brake fluid reservoir. Switch on the bleeding device. Bleeding pressure is approx. 2.0 bar.



*Bleeding brakes*

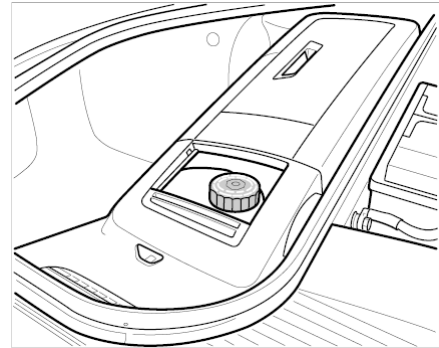
4. Continue the bleeding procedure at the brake calipers. Do so in the following sequence: rear right/rear left/front right/front left. Bleed the outer bleeder valve first.
5. Use a transparent hose and a collecting bottle to check the escaping brake fluid is clean and free of air bubbles and to determine the amount of brake fluid used.
6. Open each bleeder valve until clear, bubble-free brake fluid emerges.
7. Tighten the bleeder valves to the stipulated tightening torque and remove the bleeder hoses.
8. Generate vacuum in brake booster by starting engine. Check brake-pedal travel and pedal feel.

Check the brake system for residual air by the amount of brake pedal travel. Repeat the bleeding procedure if necessary. Operate (pump) the brake pedal at the same time as described below. This will remove the remaining air bubbles from the primary circuit.

- Open the rear right bleeder valves, then fully rapidly depress the brake pedal hard several times. Hold the brake pedal for 2 to 3 seconds after each depression, then release slowly. Continue bleeding until the brake fluid emerging into the collection bottle is free of bubbles and foam.
  - Repeat this procedure in the sequence rear left/front right/front left.
9. If necessary, continue bleeding the secondary circuit (using the Piwis Tester). Only necessary if the

hydraulic unit has been replaced and, after bleeding in the normal way (primary circuit), the brake pedal travel is excessive.

10. Remove bleeding device from brake fluid reservoir and screw cap on. The brake fluid level in the brake fluid reservoir must be between the MIN and MAX markings once the vehicle has been filled and bled. Adjust the brake fluid level if necessary.



*Brake fluid level*

## **2nd Step: Bleeding (secondary circuit)**

Bleeding of the secondary circuit is only necessary if the hydraulic unit has been replaced and, after bleeding in the normal way (primary circuit), the brake pedal travel is excessive.

First bleed brakes as usual (primary circuit). Only then can you carry out bleeding of the secondary circuit with the Piwis Tester. The process is menu-driven. You must observe the specified sequence rear left, front left, front right, rear right.

To bleed the secondary circuit, the bleeding device remains connected to the brake fluid reservoir. Bleeding pressure is approx. 2.0 bar.

Throughout the entire bleeding process, the brake pedal must be operated cyclically (hold depressed for 2 to 3 seconds, then release slowly). After operating pedal for the last time, hold the brake pedal down and close bleeder valve.

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997110, 997111, 997120, 997121, 997140, 997141, 997310, 997311, 997320, 997321, 997410, 997411, 997420, 997421, 997430, 997431, 997510, 997511, 997520, 997521, 997610, 997611, 997620, 997621, 997630, 997631, 997810, 997811, 997840, 997841, 997850, 997851

Model year as of 2005

C00, C02, C05, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C39, C45, C46, C98, C99