

BRAKES

Brakes - Repair

3400 BRAKE TESTING AND BLEEDING

34 00 050 BLEEDING BRAKE SYSTEM WITH DSC

Necessary preliminary work

- Remove left sensor opening
- Read and comply with GENERAL INFORMATION .

IMPORTANT: When replacing or repairing, observe the filling and bleeding instructions for the following parts:

- Tandem brake master cylinder
- Hydraulic unit
- Components and lines which are fitted between these assemblies.

Connect bleeder unit with max. 2 bar filling pressure.

A second person is needed to help carry out this work.

Only use brake fluids that have been approved by BMW, see BRAKE SYSTEM - OPERATING FLUIDS .

Connect DIS (BMW scan tool).

Select path: Service functions - Chassis and Suspension - Traction control system - Bleeding procedure.

IMPORTANT: Check relevant equipment manufacturer's operating instructions for each device.

Charging pressure should not exceed 2 bar.

Connect bleeder unit to expansion tank and switch on.

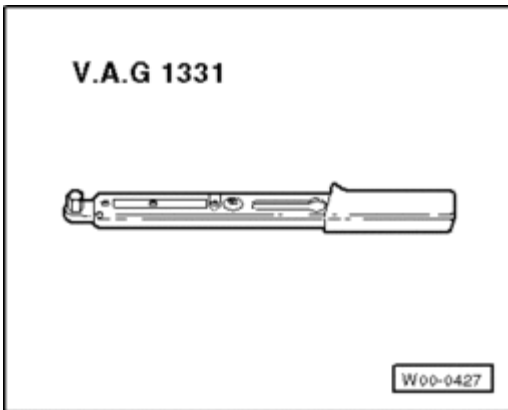


Fig. 1: Connecting Bleeder Unit To Expansion Tank
Courtesy of BMW OF NORTH AMERICA, INC.

Fully rinse the brake system

Connect vent hose with collecting vessel to vent valve on rear right brake caliper.

Open vent valve and purge until clear, bubble-free brake fluid emerges.

Close vent valve.

Follow same procedure on rear left, front right and front left wheel brake.

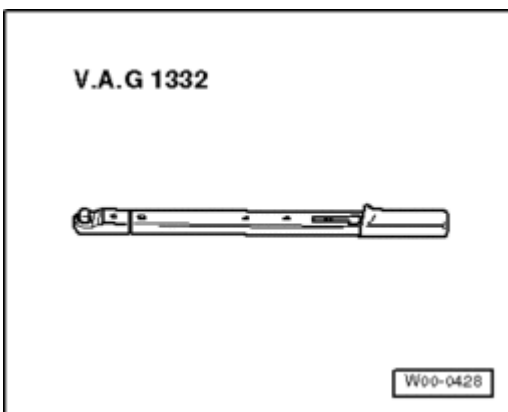


Fig. 2: Locating Vent Valve On Rear Right Brake Caliper (1 Of 2)
Courtesy of BMW OF NORTH AMERICA, INC.

Bleeding rear axle brake circuit

Connect vent hose with collecting vessel to vent valve on rear right brake caliper.

Open vent valve.

Run bleeding procedure with DIS with vent valve open.

After completing routine, press brake pedal 5 times to floor; clear and bubble-free brake fluid must flow out.

Close vent valve.

Repeat procedure at rear left.

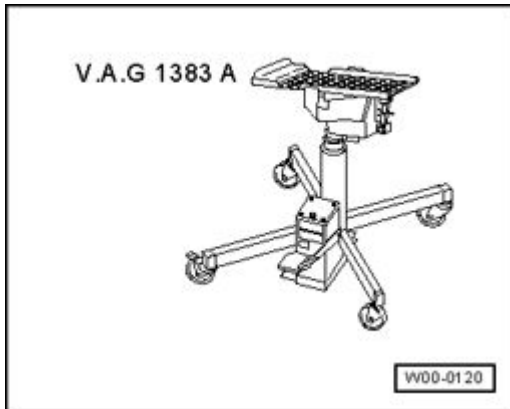


Fig. 3: Locating Vent Valve On Rear Right Brake Caliper (2 Of 2)
Courtesy of BMW OF NORTH AMERICA, INC.

Bleeding front axle brake circuit

Connect vent hose with collecting vessel to vent valve on front right brake caliper.

Open vent valve.

Run bleeding procedure with DIS with vent valve open.

After completing routine, press brake pedal 5 times to floor, clear and bubble-free brake fluid must flow out.

Close vent valve.

Repeat procedure at front left.

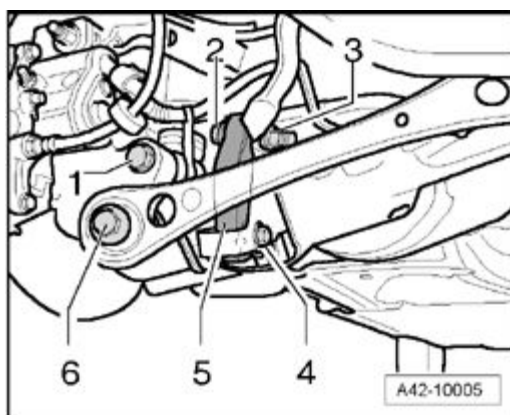


Fig. 4: Connecting Vent Hose With Collecting Vessel To Vent Valve
 Courtesy of BMW OF NORTH AMERICA, INC.

Switch off bleeder unit and remove from expansion tank.

Check brake fluid level. If necessary, top up/draw off to "MAX" level.

Close expansion tank.

NOTE: Pay attention to gasket (1) in sealing cap.

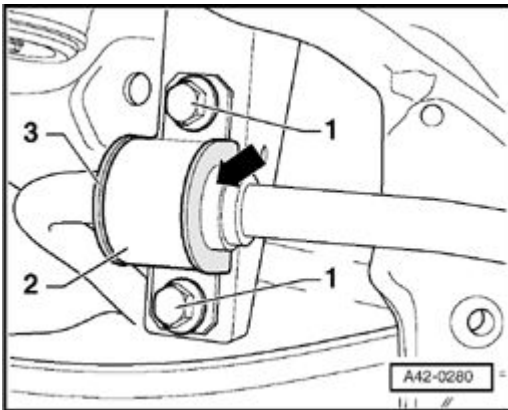


Fig. 5: Identifying Gasket And Brake Fluid Level
 Courtesy of BMW OF NORTH AMERICA, INC.

34 00... CHECKING BRAKE DISCS

Necessary preliminary tasks

- Remove **WHEELS** .

Checking thickness difference:

- Measure thickness difference within brake surfaces at 8 point (spread over the circumference) with a micrometer gauge
- Compare measurement result with **setpoint value** . See **FRONT BRAKE** or **REAR BRAKE**

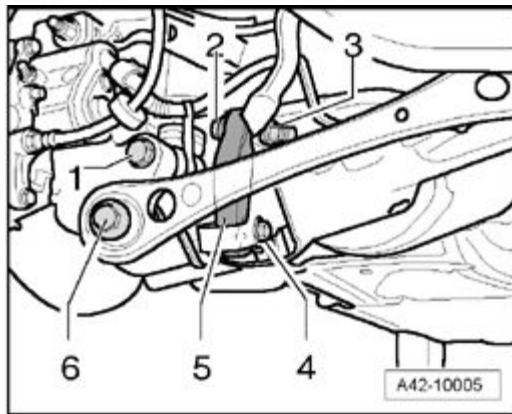


Fig. 6: Measuring Thickness Difference Within Brake Surfaces Using Micrometer Gauge
 Courtesy of BMW OF NORTH AMERICA, INC.

Check minimum brake disc thickness:

- Position special tool **34 1 280** at three measuring points in area (1) and measure.
- Compare measurement result and lowest value with **setpoint value** . See **FRONT BRAKE** or **REAR BRAKE**

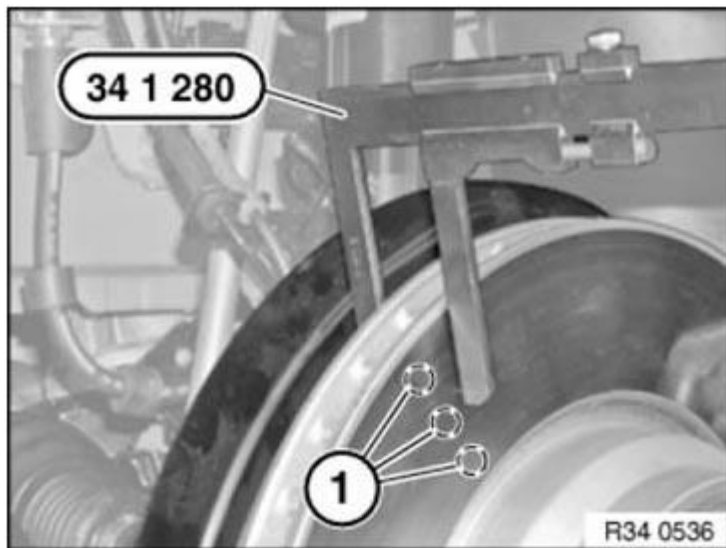


Fig. 7: Checking Brake Disc Thickness
 Courtesy of BMW OF NORTH AMERICA, INC.

34 00 010 CHECKING THICKNESS OF BRAKE PAD

Notes

NOTE: The thickness of the outer brake pads can be determined without removing the wheels.