

Bleeding brake system

Bleeding sequence for vehicles with Electronic Stability Program (ESP)

Please note:

A pressure of at least 2 bar is required for bleeding the ESP hydraulic unit. Therefore always check the pressure setting on the bleeding device.

First, all of the brake calipers are bled using the conventional method, but in a different sequence.

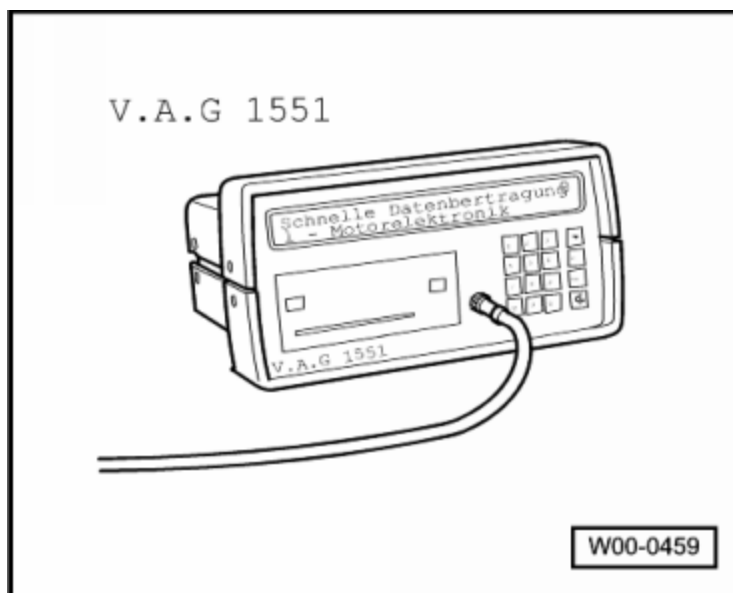
Afterwards the ESP hydraulic pump needs to be bled. This is done using the fault reader.

The fault reader is used to actuate the hydraulic pump for 10 s.

This actuation must only be carried out a maximum of 3 times in succession (approx. 30 sec.). Then the pump must be left to cool for at least 5 minutes.

Special tools and workshop equipment required

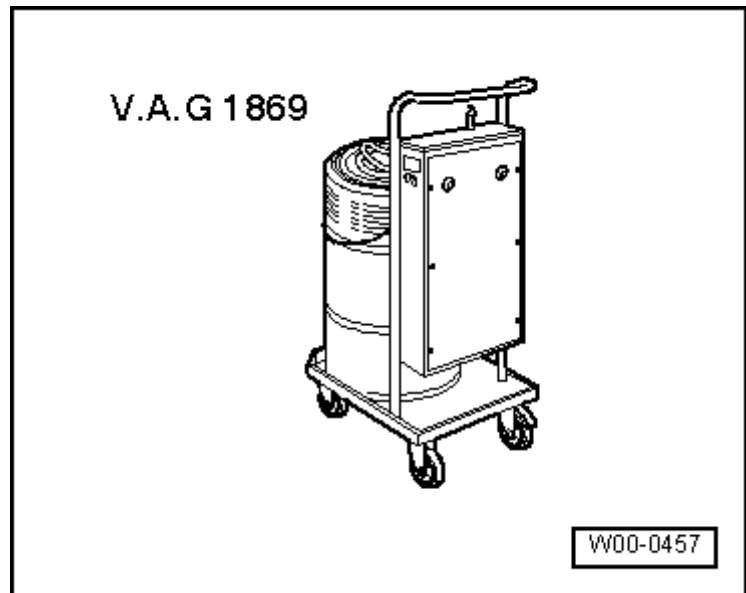
- ♦ V.A.G 1551 or V.A.G 1552



- ♦ V.A.G 1869 bleeding appliance.

Bleeding sequence

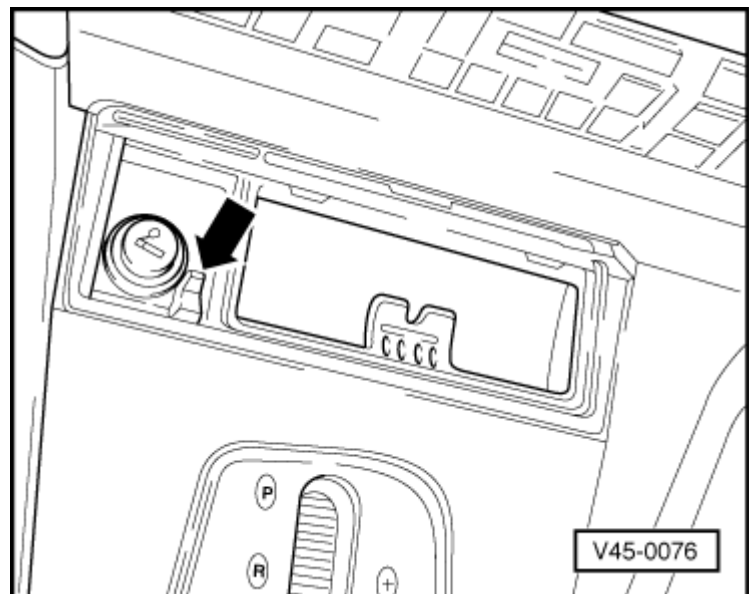
- 1 - Rear left brake caliper
- 2 - Front right brake caliper
- 3 - Rear right brake caliper
- 4 - Front left brake caliper
- – Bleed the calipers until clear, bubble-free brake fluid emerges.
- – Close bleed screw.



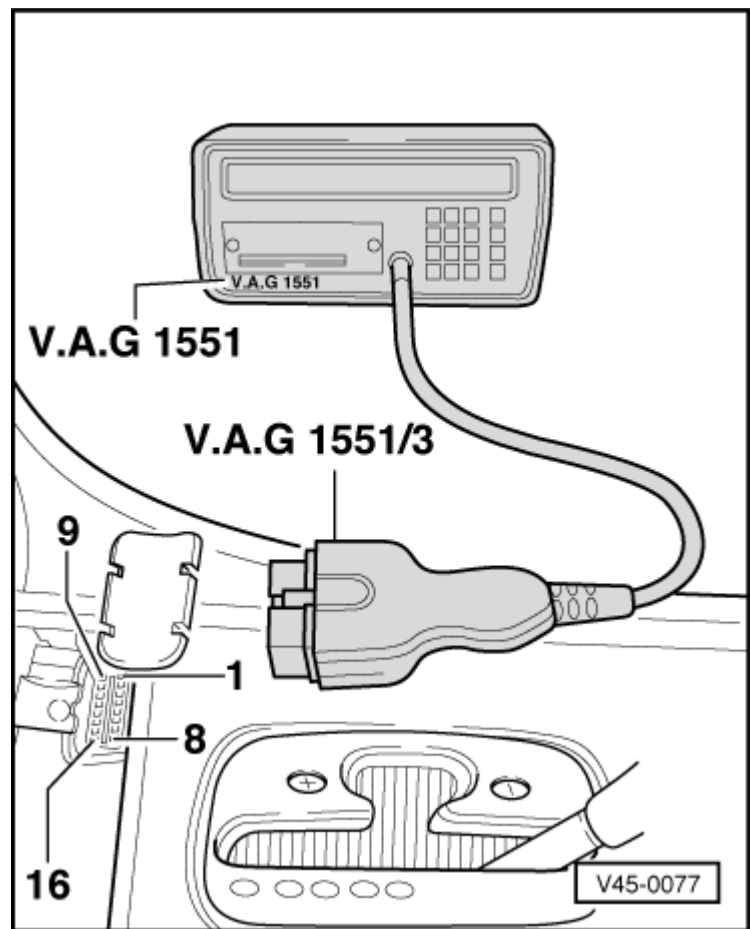
Connecting fault reader V.A.G 1551 and selecting address word

The vehicle systems tester V.A.G 1552 can also be used instead of fault reader V.A.G 1551. However, with vehicle systems tester V.A.G 1552 there is no option to print out information.

- – → Unlatch the ash tray and remove it from the centre console.



- – Remove the cover for the diagnostic connector.
- – → With the ignition off, connect fault reader to diagnostic connector using wire V.A.G 1551/3.



→ Indicated on display:

1) Displayed alternately

V.A.G

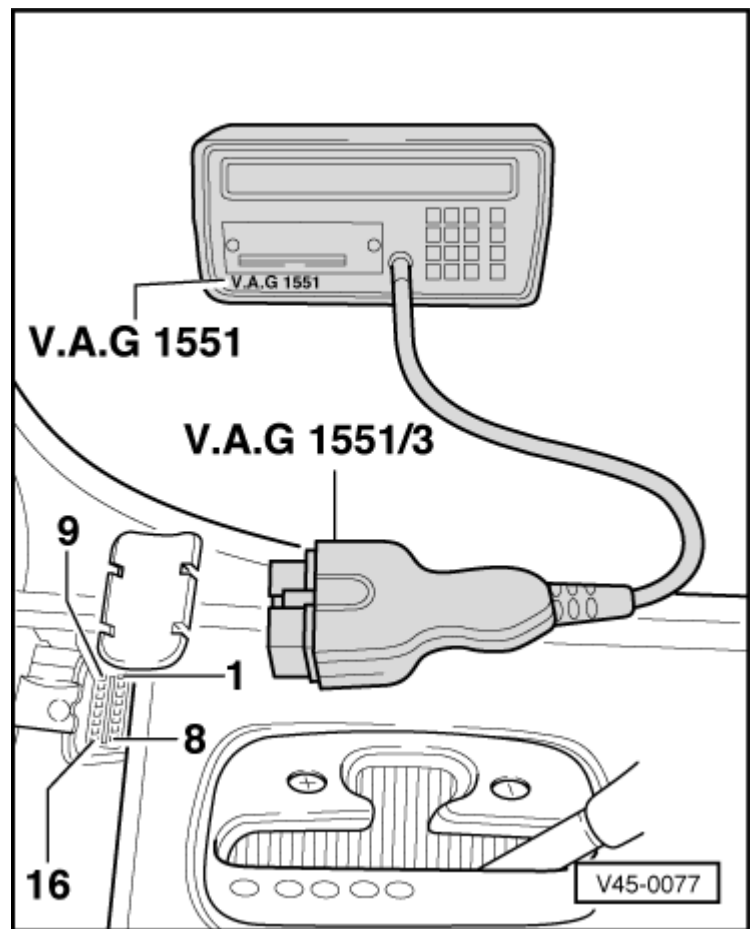
Notes:

- ♦ Check the connections of the diagnostic connector if there is no display on the screen.

=> Current Flow Diagrams, Electrical
Fault-finding and Fitting Locations

- ♦ The PRINT key is used to switch on the printer. When the printer is on the warning lamp in the print key illuminates.
- ♦ Depending on the program, additional operating information can be printed out by pressing the HELP key of V.A.G 1551.
- – Switch the ignition on.
- – Switch on the printer by pressing the Print key on the fault reader.

- – Press key -1- for "Rapid data transfer" operating mode.



→ Indicated on display:

Rapid data transfer HELP
Enter address word XX

- – Press keys 0 and 3 for the address word "Brake electronics".

→ Indicated on display:

Rapid data transfer Q
03 Brake electronics

- – Confirm input with Q key.

→ Display after address word 03 has been entered:

Rapid data
transfer
Tester sends
address word 03

Note:

If there is a fault in the communications build-up between the fault reader V.A.G 1551 and the control unit:

=> [Running Gear Self-Diagnosis; Repair group 01; Basic Notes on Self-Diagnosis; Connecting fault reader V.A.G 1551 and selecting address word](#)

→ Indicated on display:

Rapid data transfer HELP

Select function XX

- – Press keys 0 and 4 to select function "Basic setting".

→ Indicated on display:

Rapid data transfer Q
04 Basic setting

- – Confirm input with Q key.

→ Indicated on display:

Basic setting Q
Enter display group number
XXX

- Open the bleeder screw on the front left brake caliper.
- – Press the keys 0, 0 and 2 and confirm the entry by pressing Q.

→ Indicated on display:

System in basic
setting 2⇒
Bleeding system

The ESP hydraulic pump -V156- is now actuated for 10 seconds.

This actuation must only be carried out a maximum of 3 times in succession (approx. 30 sec.). Then the pump must be left to cool for at least 5 minutes.

To cancel the actuation press the ⇒ key. The program then returns to its initial settings.

→ Indicated on display:

Rapid data transfer HELP
Select function XX

- – Bleed the calipers until clear, bubble-free brake fluid emerges.
- – Close bleed screw.
- – Press keys 0 and 6 for the function "End output".

→ Indicated on display:

Rapid data transfer Q
06 - End output

- – Confirm input with Q key.

→ Indicated on display:

Rapid data
transfer HELP
Enter address word XX

- – Switch ignition off.
- – Disconnect fault reader.
- – Switch off V.A.G 1869.
- – Check the brake fluid level in the reservoir and correct as necessary.