

Adjusting adaptive cruise control

Before calibrating the adaptive cruise control, inspect the sensor, its brackets, and mounting hardware for damage. Ensure these components are securely fastened. Repair any damage found.

Before calibrating the adaptive cruise control, query the event recorder and correct any detected faults.

The "misalignment angle" should be read from the adaptive cruise control unit to determine whether the sensor is misaligned.

Calibration of the adaptive cruise control must only be carried out using a wheel alignment stand and adjustment devices approved for use by VW/AUDI!

Correct calibration is a prerequisite for the perfect operation of adaptive cruise control.

The adaptive cruise control control unit -J428- must be calibrated/set under the following conditions:

- ♦ the adaptive cruise control control unit -J428- has been removed and installed or replaced;
- ♦ the front support panel was brought into service position;
- ♦ the front support panel was removed and installed or replaced;
- ♦ The misalignment angle is out of tolerance. Perform a tolerance check using a diagnostic tester.
- ♦ the rear wheel alignment was adjusted;
- ♦ The car's chassis was re-equipped, changing the height of the body;
- ♦ The normal level value has been readjusted.

Necessary special devices, control and measuring instruments, as well as auxiliary means

- ♦ Adjustment device -VAS 6430- or Adjustment device, basic set -VAS 6430/1-
- ♦ Mirror for setting up adaptive cruise control -VAS 6430/3-
- ♦ Adapter -VAS 6430/9-, only for floor lifts with a design dimension greater than 300 mm
- ♦ Adjustment tool -VAS 272 001- (not shown)
- ♦ Diagnostic tester
- ♦ Wheel alignment stand
- ♦ Measuring heads, depending on the stand manufacturer



Instruction

- ♦ *Before placing the vehicle on a wheel alignment lift, check that there is sufficient space between the vehicle and the wheel alignment device -VAS 6430-. The distance between the wheel alignment device -VAS 6430- and the sensor must be 1200 mm $\pm$ 25 mm.*
- ♦ *If there is not enough space, it is necessary to roll the car back on the lift to free up the required area.*
- Before calibration/adjustment, the event recorder should be interrogated and any detected faults should be corrected if necessary.

The calibration procedure is described in the operating instructions for the adjustment device -VAS 6430-.

Follow the following sequence for performing calibration work:

- 1 - Set the distance between the centrally located mirror for adjusting the adaptive cruise control -VAS 6430/3- and the VW emblem in the radiator grille to 1200 mm $\pm$ 25 mm.**
- 2 - Install the adaptive cruise control adjustment mirror -VAS 6430/3- in the center of the adjustment beam.**
- 3 - Align the adaptive cruise control control unit -J428-.**



If wheel alignment was performed before calibration, do not perform the steps in the section "Calibration without prior wheel alignment".

Calibration without preliminary wheel alignment

- Observe the test conditions for adjusting the wheel alignment angles

→ Chassis, axles, steering; Repair group 44;
Wheel alignment; Test conditions
.
- Follow the measurement processes for preparing for calibration/adjustment of driver assistance systems
→ Chassis, axles, steering; Repair group 44;
Wheel alignment; measuring processes
.
- On vehicles with air suspension, install and lock
→ Tester .
- On vehicles with rear-axle steering, set the steering system to the zero position → Tester .
This is the only way to ensure that the rear-axle steering system is set for straight-ahead driving.
- Drive the vehicle straight onto the wheel alignment stand. Turn off the ignition only when the vehicle comes to a stop.
- Connect the charger

→ Electrical Equipment; Repair Group 27;
Battery; Battery Charging
.
- Connect → Tester . (Pass the diagnostic cable through an open window).



Instruction

During calibration, all vehicle doors must remain closed and exterior lights must be turned off.

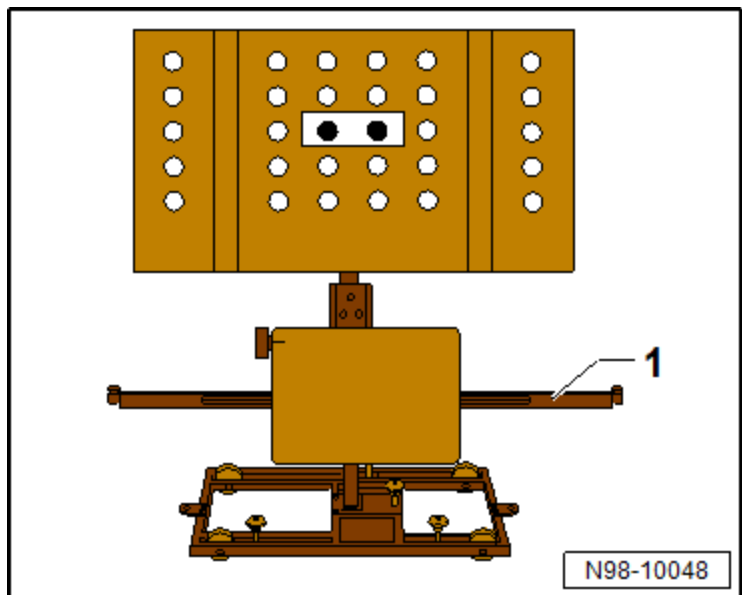
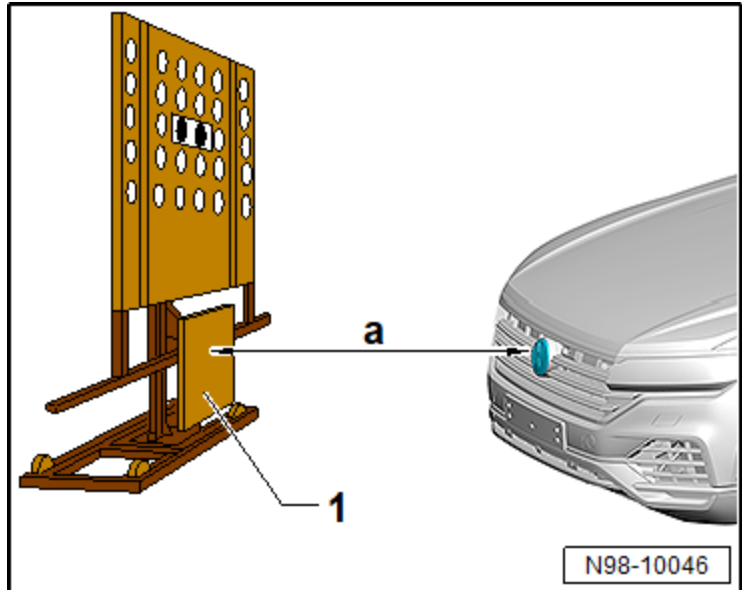
- Set the front wheels to the straight ahead position.
- Install quick release clamps on the wheels.
- Mount the reflectors on quick-release clamps.
- Compensate for wheel rim runout.

Calibration with or without prior wheel alignment

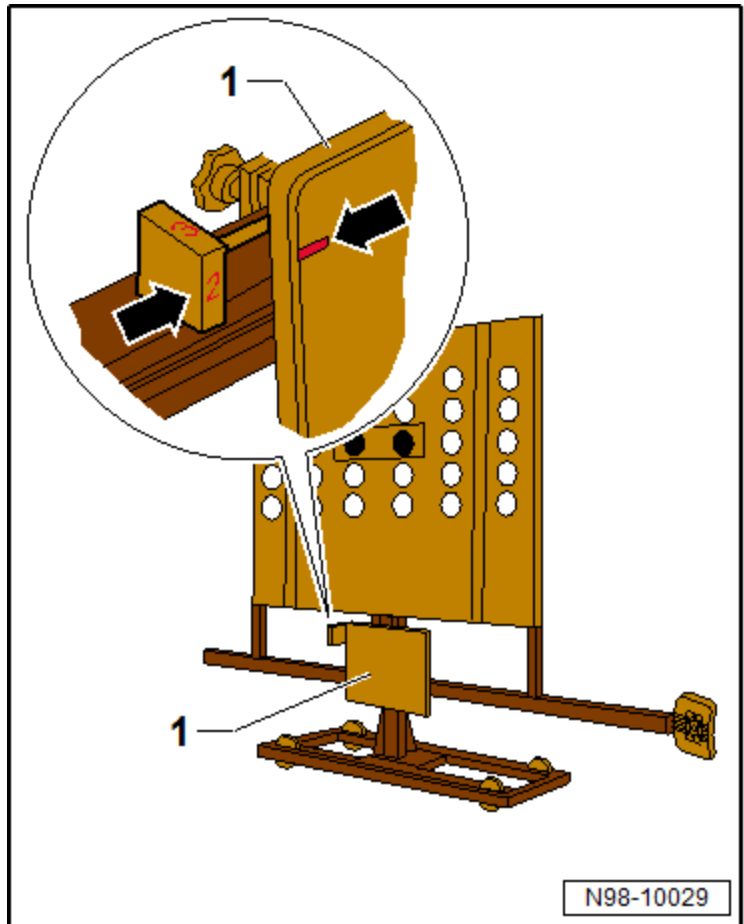
- Select the adaptive cruise control calibration icon on the wheel alignment stand.
- The adaptive cruise control adjustment tool must not be moved along the adjustment beam.
- Position the adjusting device -VAS 6430- parallel to the longitudinal axis of the vehicle at a distance -a- from the centrally located mirror for adjusting the adaptive cruise control -VAS 6430/3- -1- to the VW emblem in the radiator grille.
- Size -a- = 1200 mm $\pm$ 25 mm
- Remove the VW emblem

→ External reinforcement work; Repair group 66; Badges and emblems; Removal and installation of the front emblem

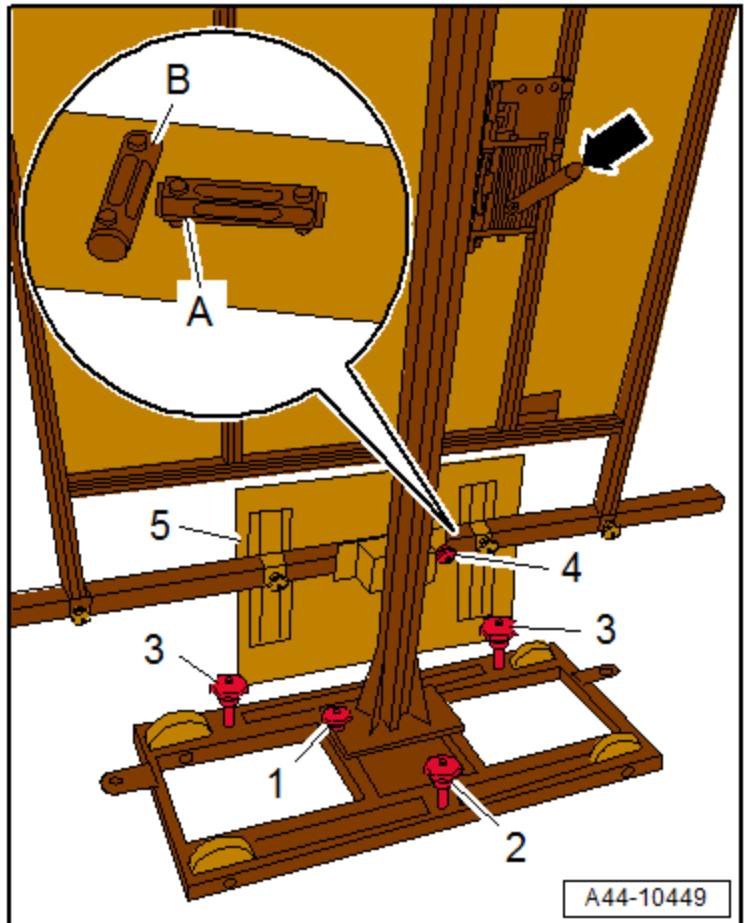
- If necessary, remove dirt from the sensor lens.
- Mount the measuring heads according to the manufacturer's instructions for the adaptive cruise control adjustment stand -1- on the right-hand side of the adjustment device -VAS 6430- and secure with screws.



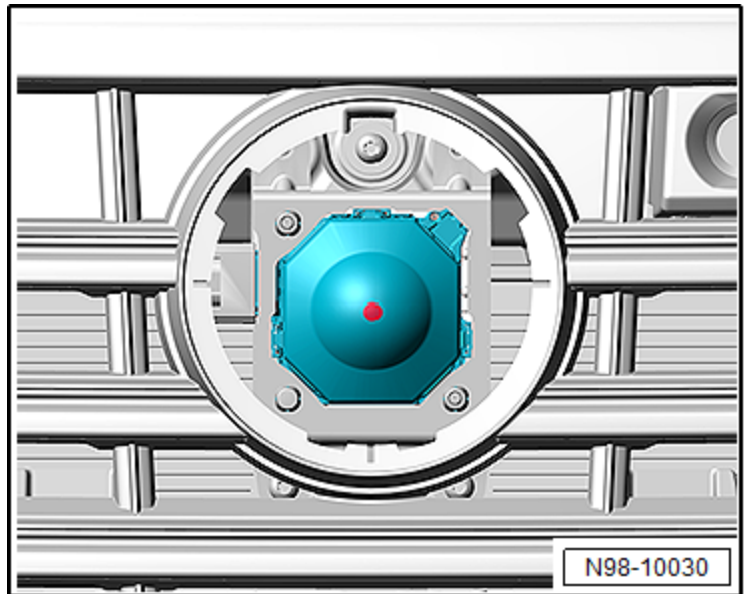
- Set the rotary knob on the -VAS 6430/3- -1- to the position where the number “2” is opposite the dashed marking -arrow- .



- Set the level -A- using the adjusting screw -1- to the balanced position.
- Use the adjusting screws -2- and -3- to set the level -B- to a horizontal position.
- Using the handle -arrow-, set the mirror -5- so that the laser beam is positioned on the horizontal axis of symmetry of the radar sensor lens.



- Move the mirror laterally so that the laser beam is aligned with the vertical axis of symmetry of the radar sensor lens -1- .



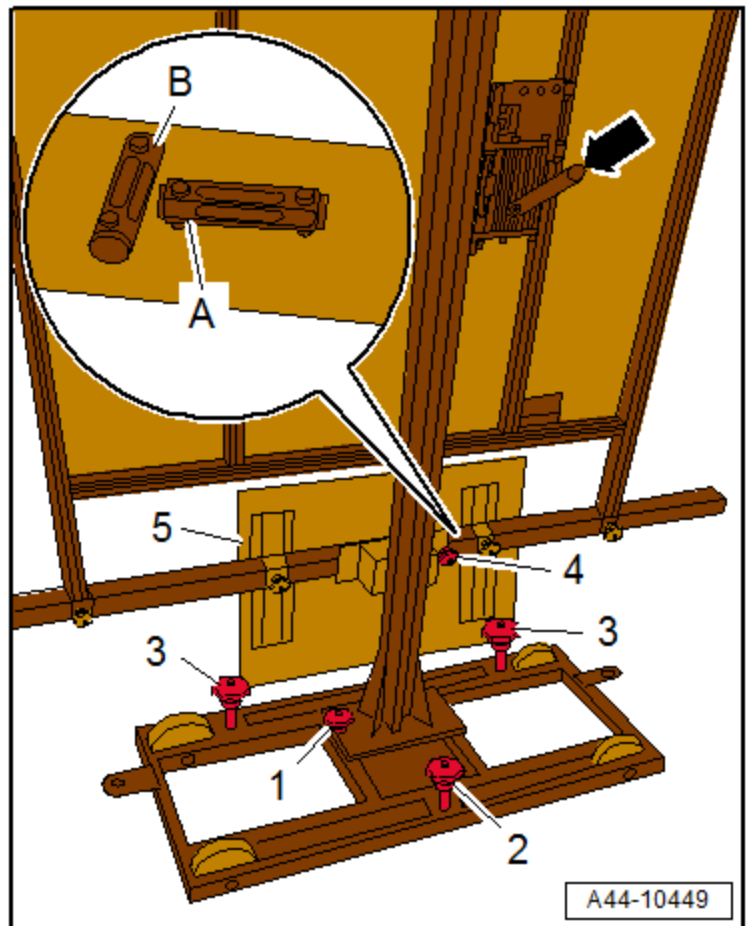
- Turn the fine adjustment screw -4- until a value within the permissible range appears on the display of the stand.
- After this, check again using the laser beam of the device -VAS 6430/3- whether the levels are set to a horizontal position and whether the laser beam hits the center of the radar sensor lens.



Instruction

If the laser beam does not hit the lens of the radar sensor, the position of the device -VAS 6430/3- must be adjusted again.

- In the → **Tester** operating modes, select and run **Diagnostics** .
- Select the **Diagnostic Plan** tab .
- Press the **Self-Diagnostics** button and then select the following on-screen buttons in sequence:
 - ♦ Diagnostic systems
 - ♦ 0013 – Adaptive cruise control
 - ♦ 0013 – Adaptive cruise control, functions
 - ♦ 0013 – Calibration
- Run the selected program and follow the instructions on the tester display.

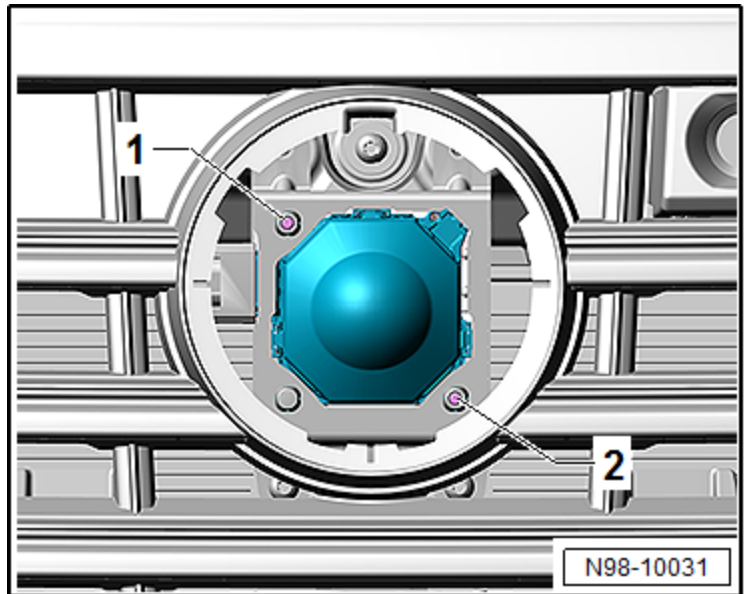


- Fine adjustment of the adaptive cruise control control unit -J428- is carried out using screws -1- and -2- using the adjusting tool -VAS 272 001-.
- Turn off the ignition.
- Disconnect the tester from the diagnostic connector.
- Disconnect the charger

→ Electrical Equipment; Repair Group 27;
Battery; Battery Charging

- Install the VW emblem

→ External reinforcement work; Repair group 66;
Badges and emblems; Removal and installation
of the front emblem



All data is taken from the website superetka.com/elsa and is completely free.