

## Self-diagnosis

## Zero position compensation of steering angle sender -G85

Zero position compensation of steering angle sender must be performed with an accuracy of  $\pm 5$  degrees.

Zero position compensation for steering angle sender -G85 is necessary:

- ◆ If control unit -J104, steering angle sender -G85 or the steering column are replaced.
  - ◆ After encoding control unit -J104,
  - ◆ If suspension geometry is adjusted when checking wheel alignment.
  - ◆ If there is a fault in the fault memory of control unit -J104 and the instructions in the fault table require the zero position compensation to be carried out.
- – Start the vehicle.
  - – Turn steering wheel one turn to the right and one turn to the left.
  - – Perform short test drive on even surface. Drive in a straight line on a level surface at a speed not higher than 20 km/h.
  - – If the steering wheel is straight during the test drive then stop the vehicle from the forward drive.
    - – Perform zero position compensation (refer to next page but one).
  - Ensure that the steering wheel is not moved again.
  - Do not switch off the ignition.

Or:

- – If test drive reveals steering wheel to be not properly centred make the necessary adjustments by checking wheel alignment => FWD and 4WD Running Gear; Repair group 44.
  - – Perform zero position compensation (refer to next page).
- Ensure that the steering wheel is not moved again.
- Do not switch off the ignition.
- – Connect up vehicle diagnostic, testing and information system VAS 5051/fault reader V.A.G 1551 and select "Brake electronics" with address word 03 => Page [01-4](#).

→ Indicated on display:

Rapid data transfer    HELP  
Select function XX

- – Press 1 twice to select the function "Login procedure".

→ Indicated on display:

Rapid data transfer    Q  
11 - Login procedure

- – Confirm input with Q key.

→ Indicated on display:

Login procedure    Q  
Enter code number XXXXX

- – Enter code number 40168 and confirm entry with Q key.

→ 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
- – Press keys 0, 0 and 1 and confirm entry by pressing Q.
- If this display appears, this means the function "Login procedure" has not been performed successfully. Function unknown or cannot ⇒  
be carried out at present.
- Indicated on display: System in basic setting  
1 ⇒  
Steer. angle sender  
compens. OK
- – Check zero position by way of function 08 "Read measured value block", => Page [01-204](#)

Or:

- Indicated on display: System in basic setting 1 ⇒  
Steer. angle sender  
compens. not OK
- – Interrogate fault memory =>Page [01-296](#)
  - – Delete fault memory => Page [01-12](#)
  - – Switch ignition off.
  - – Switch the ignition on.
  - – Perform zero position compensation again.
  - – Go back to the initial settings of the program by pressing the ⇒ key:

- Indicated on display: Rapid data transfer HELP  
Select function XX

Or:

- Indicated on display: System in basic setting 1 ⇒  
Steer. angle sender  
compens. Disabled
- Steering wheel has not been given one turn to right and one turn to left.
  - – Switch ignition off.
  - – Switch the ignition on.
  - – Perform zero position compensation again.
  - – Go back to the initial settings of the program by pressing the ⇒ key:

→ Indicated on display:

Rapid data transfer    HELP  
Select function XX