

Steering gear JRP1160, JRP219, JRP289, JRP739

If, following the replacement of one of the steering gears mentioned above and after setting the front and rear axles on the vehicle, the steering wheel is turned more than 45° when the wheels are in the straight-ahead position, this can only be corrected using the following working instructions.

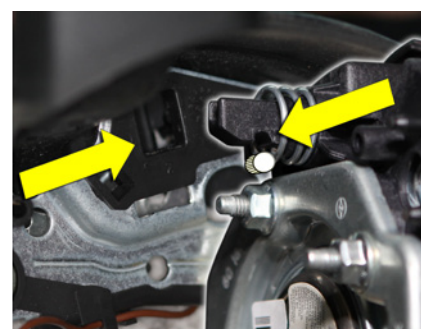
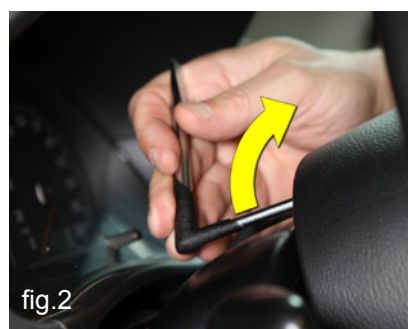
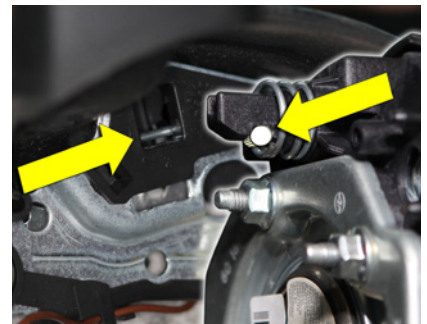
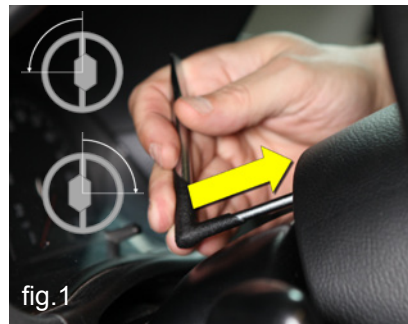
Caution: Do not attempt to correct the straight-ahead position using the tie rods. This can cause the steering system to fail!

Note: All the work described must only be performed by trained specialist staff and in accordance with the directives and safety regulations of the vehicle manufacturer. Work on the airbag must only be carried out by personnel who also have a permit in accordance with explosives law (airbag certificate). The vehicle manufacturer's repair instructions and suitable test devices should be available whilst the measures are being implemented. The illustrations provided are typical and for guidance only. Depending on the type of vehicle, the work steps can vary in sequence. Technical alterations are possible. TRW assumes no liability in case of incorrect handling or incorrect installation!

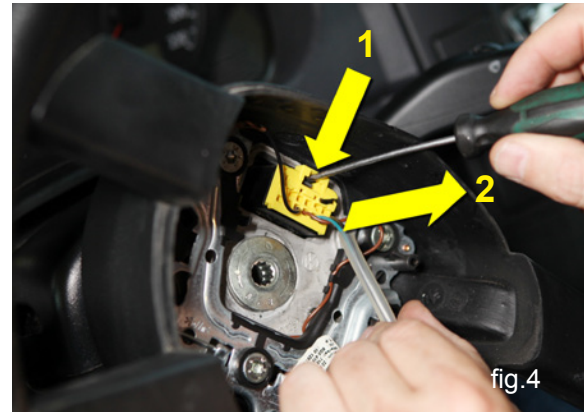


Procedure:

1. Move the wheels into the straight-ahead position regardless of the position of the steering wheel.
2. Measure and set the tracking of the front and rear axles in accordance with the vehicle manufacturer's guidelines.
3. Disconnect the vehicle battery.
Make sure that any required information, e.g. radio code, is available.
4. To release the retaining brackets of the airbag module, turn the steering wheel 90° to left and right as shown in fig.1 and fig.2.
5. Carefully lift the airbag module. Unlock and disconnect the plug connector (fig.3) and remove the airbag module.
Caution: Set the airbag down outside of the vehicle with the plug connector side facing downwards.
6. Move the wheels into the straight-ahead position regardless of the position of the steering wheel.



7. Unlock (1 - fig.4) and remove (2 - fig.4) the plug of the contact roller.
8. Unfasten and remove the fastening nut on the steering wheel (fig. 5) and carefully pull off the steering wheel.
9. Pull off the contact roller (1 - fig.6), turn it into straight-ahead position (2 - fig.6) and attach it back to steering column with the connector socket to top (3 - fig.6).
10. Attach the steering wheel in straight-ahead position and tighten a new fastening nut (fig.7) to the torque as stipulated by the vehicle manufacturer.



Complete the vehicle again:

- Connect the plug connector for the contact roller
 - Connect and lock the plug connector for the airbag module
 - Attach the airbag module. *Make sure that the module snaps into the retaining brackets.*
 - Connect the battery
11. Start the engine. The steering system and vehicle stability control warning lights (fig.8) must expire. *If one or both warning lights are still illuminated, carry out the following procedure: **With the engine running, turn the steering wheel slowly to right and left rest position until the warning lights switch off.** With this procedure the steering angle sensor is calibrated automatically.* If the lights have not switched off, reset and calibrate the system with an appropriate diagnostic tool.



After completion of the work the fault codes has to be read out and the existing fault codes have to be deleted.

12. Perform a test drive. *If the work described has been carried out correctly, the steering wheel will be in the correct position when driving straight ahead. There must be no fault codes left in the system.*

