

# Tips and tricks for workshops

## Reliable and safe: Replacement of Bosch electric steering systems

Due to their safety-relevant nature, steering systems are mostly maintenance-free and designed to last for the complete vehicle life cycle. Of course, attachment parts such as tie rods and bellows can be damaged or worn out and should then be replaced. However, complete steering systems usually only need to be replaced in the event of an accident or mechanical overloads affecting the steering function. When working on steering systems, comprehensive visual and functional inspections are always the first step.

For this purpose, operating forces, resetting, clearances, noises and the warning lamp are checked. Workshops using ESI[tronic] software will find comprehensive service and installation instructions included within the SIS module. They provide information concerning troubleshooting on electrical and mechanical systems. Afterwards, an additional in-depth diagnosis is performed to determine whether a steering system needs to be replaced or if it can be repaired.

### The following points should always be observed:

- Install the steering system exactly as described in the installation manual.
- Only use attachment parts such as tie rods, bellows and mounting clamps approved by the manufacturer.
- Install all attachment parts properly as to prevent consequential damages such as corrosion.
- Most electric steering systems need to be parameterized once they have been replaced. The parameterization can be done via software update using an appropriate diagnostic tester (for instance Bosch DCU 220 with KTS 560/590) or via OEM portal ("PassThru").
- Calibrate the steering-angle sensor using an appropriate diagnostic tester (for instance a Bosch tester or an original one).
- Before setting the software end stops, it might be necessary to reset preset values using a diagnostic tester. Software end stops are set driving slowly (5–10 km/h) or on turntables.
- Make sure the warning lamp turns off and the fault memory is cleared after the installation.
- Last but not least, perform a test ride on non-public grounds to check the steering system's proper functioning.



### Additional information

 **Service documents and installation instructions**

**TecDoc:** <https://web.tecalliance.net/tecdocsw/en/login>

 **Online at**

[www.boschaftermarket.com](http://www.boschaftermarket.com)