

Replacing electric steering systems: easy and efficient with Remote Diagnostics Service

Replacing electric steering systems requires special know-how. Bosch supports with parts, test equipment and Remote Diagnostics Services.

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Electric steering systems EPSdp (Dual Pinion) and EPSapa (Axle Parallel)

Electric Power Steering (EPS) – electric steering prevails

Today most newly registered cars are equipped with electric power steering systems. The steering assistance is generated using an electric motor, whose force acts on the rack via a servo gear. This system has several advantages over hydraulic steering systems. The energy requirement is limited to the actual steering activity, reducing fuel consumption and CO₂ emissions. In addition, electric steering systems are an important basis for driver assistance systems and automated driving functions. Different steering modes can be integrated here. Even the use of the latest over-the-air technology becomes possible. Moreover, electric steering systems are generally supplied with power via the vehicle electrical system, which means they can be used regardless of the vehicle's drive type.

An EPS replacement is more than just mechanical work

As a particularly safety-relevant vehicle component, steering systems are mostly maintenance-free and their durability is designed for the entire vehicle life cycle. However, if there is damage due to an accident or mechanical overload, the electric steering system may need to be replaced. In addition to mechanical work, this often requires electrical commissioning of the steering system. This can create various challenges for workshops when replacing the steering systems.

Challenges when replacing electric steering systems

The extent to which electrical commissioning is necessary can vary depending on the vehicle model and manufacturer. This includes, for example, recoding of the embedded

software or parameterization to make the steering work properly. During this process, the steering system is individually adjusted to the respective vehicle. This can be complicated by different software versions depending on the vehicle variant. In addition, since multi-brand diagnostic devices are limited in their functions, service is often only possible with an OE diagnostic device.



Steering installation in the workshop



120 electric steering systems from Bosch

Workshops can choose among the comprehensive range of about **120 Bosch electric steering systems for cars and light commercial vehicles**. These undergo strict functional and quality controls based on original equipment standards. As a high-quality alternative for value-based vehicle repairs, selected steering systems are also available in the Bosch eXchange program.

While the replacement mechanics are generally known from working with hydraulic steering systems, the EPS replacement also requires special know-how for commissioning products with embedded software. At the same time, the high safety relevance of the steering system makes proper EPS replacement essential.

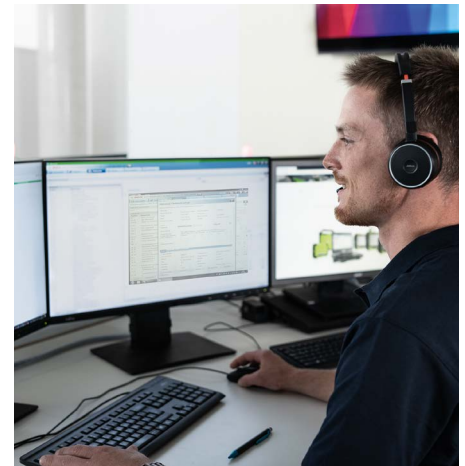
Matthias Timpel, product manager for electric steering systems at Bosch, says: “Electric steering systems are equipped with embedded software and must be reprogrammed or recoded when they are replaced. This increases the competency requirements for the workshops.”

Bosch supports EPS exchange with Remote Diagnostics Service

With Bosch Remote Diagnostics Service, qualified experts access the vehicle remotely using the RDS 500 or the KTS 350/560/590 and carry out diagnostic work. When replacing EPS, they can simplify the process by performing tasks such as coding the steering gear or calibrating the steering angle sensor. While the requested activity is being carried out, the mechanic can concentrate on other tasks. The offer is currently available in 15 countries and is continually being expanded.

Joel Trescher, product manager for Remote Diagnostics Service, says: “The Bosch Remote Diagnostics Service supports high competence requirements and a lack of OE diagnostic devices. Here, the qualified experts from Bosch help remotely to bring electric steering systems back into operation after replacement.”

The Remote Diagnostics Service enables online appointment bookings that workshops can be supported even when time frames are tight. If the workshop uses the RDS 500 for diagnostics, the device comes with a lifetime functional guarantee and will be replaced in case of damage in accordance with the warranty conditions.



Remote diagnosis by Bosch experts

Alternatively, the KTS 350/560/590 diagnostic devices can be used. Additional hardware is not necessary here as the remote diagnosis is integrated via a free software update. For accessing the services, there is a simple price structure with three price levels.

The Remote Diagnostics Service is therefore an excellent solution that makes everyday work for workshops easier and more efficient.



Find out more about Remote Diagnostics Service

Remote Diagnostics Service: easy, functional, fast



1. Initiate a request online in the customer portal or via ESI[tronic] Evolution and book the service.



2. Connect the vehicle to the KTS 350/560/590 or the RDS 500.



3. The expert will perform the task remotely and report as soon as it has been completed.