# Truck World

A Bosch magazine for the aftermarket
Edition 43, 10|25

**DCI 200/700**
More data for injector testing
**Page 2**

**Carefree promise**
Warranty extension of up to 5 years
**Page 4**

**Identification**
VIN readout with just one click
**Page 5**

**Welcome!**

While workshops always keep an eye on the future, turnovers are generated here and now. Nowadays, almost all commercial vehicles entering workshops are driven by diesel engines. Bosch provides tailored support for this purpose. At this issue of the Truck World magazine, we present the DCI 200/700 test benches for common-rail injector diagnoses with a continuously updated database, warranty extensions for diagnostic devices, new features in ESI[tronic] software, test and repair options for Denoxtronic systems as well as the use of renewable fuels. And, of course, we report on six-time ETRC champion Jochen Hahn, who recently claimed his sixth vice-championship title on Circuito del Jarama in Spain – driving his DVO diesel-powered race truck.

Enjoy reading and have a safe journey into a connected workshop future!

**Your commercial-vehicle team**

Photo: Bartscher/Team Hahn Racing

# Diesel data

## Accurate testing of modern injectors with an up-to-date database


Since the first common-rail system in a diesel-powered passenger car was introduced in 1997, injection technology has evolved significantly. The separation of pressure generation and injection enabled more precise control through electronic engine management systems – thus laying the foundation for the growing influence of software on diesel engine performance. To reduce fuel consumption and emissions, systems with higher pressures were developed. Injectors featuring piezo technology – as used in the latest generation of common-rail systems – can handle pressures of up to 2,500 bar, ensuring outstanding performance and efficiency. To meet latest and increasing demands, test equipment must also be further developed. As a result, the use of powerful software and hardware has become increasingly important – both for control units and for test benches.

**Advantages of DCI 200 and DCI 700**

With 930 million Bosch common-rail injectors in operation worldwide, workshops have enormous turnover potentials. They can be fully realized using the Bosch DCI 200 and DCI 700 diesel common-rail injector test benches. These devices provide for substantial time savings thanks to short setup times and an average test duration of just 15 minutes – including installation and removal.

**Precise test procedures increase the workshop efficiency**

With fast and accurate test procedures, including IMA coding, DCI 200 and DCI 700 ensure high quality, reliability, and transparency when testing Bosch injectors. Their patented rotating rail enables efficient operation. Since there are no sensitive high-pressure hoses, maintenance costs remain low and putting them into operation is simple.


Injector test bench DCI 700

**Accurate testing thanks to new measurement options and database**
The DCI 200 and DCI 700 injector test benches are connected to a comprehensive database which is continuously expanded. This allows for quick and reliable testing of various injector types – including advanced technologies such as VCC (Valve Closing Control) and NCC (Needle Closing Control) used in Euro 5 and Euro 6 engines. To cover the widest possible range of injectors, new models are regularly added to the DCI database.

**Workshop tip**

The Bosch help center contains both the injector database and the CRIN adapter list. Search for **"Release"** in the relevant DCI tile to view the current injector coverage. The required CRIN adapters can be found by searching for **"CRIN adapter."**

Simply scan the QR code for quick access!

**https://help.boschdiagnostics.com**

**DCI instead of EPS: a database built for the future**
Due to the ongoing development of injector technologies, higher system pressures, and the use of new signal types, traditional injection-pump test benches (EPS) reached the limits of their measurement capabilities. The DCI database now includes more than 2,200 injector types, thus covering all injector families which can no longer be tested on EPS systems. Compared with the EPS database previously used, the DCI database contains roughly 25% more part numbers. Considering the global Bosch injector population, DCI customers benefit from a coverage exceeding 36 %.
By now, a total of eleven injector families can only be tested using DCI test benches.

## Special accessories

**CRIN Expert-Kit**
The expert kit for DCI 700 extends measurement capabilities with stroke-to-stroke testing of Bosch common-rail injectors. It compares and evaluates the injection quantities measured during the test to automatically detect major deviations and faulty injectors. The results are displayed as pass or fail.

**CRIN Bosch**
for testing Bosch CRIN 4.2 commercial-vehicle injectors (image shows accessories for DCI 700).

**CRIN Bosch 4.2**
for testing Bosch CRIN commercial-vehicle injectors (image shows accessories for DCI 700).

**Testing Delphi Euro 6 injectors**
As a special accessory, the new adapter cable allows testing Delphi Euro 6 injectors used in Volvo, Renault, and DAF vehicles. It is compatible with both test benches and can be used together with the CRI third-party manufacturer kit and an external-provider license.

# 5-year warranty on workshop equipment*

## The Bosch 5-year care-free promise protects workshops‘ investments in diagnostic equipment


Diagnostic equipment represents one of the most significant investments for any workshop. Not only does it contribute to economic success, but it’s also essential for accurate fault diagnoses, compliance with legal regulations, and customer satisfaction. This is why it’s crucial for these devices to remain fully operational at all times, even when subjected to the rigorous demands of intensive daily use.

**Service for Bosch workshop equipment**

**5-year warranty with intermediate inspection**
for KTS Truck, DCU, FSA and BAT

**5-year warranty with 5 annual inspections**
for BEA, FSA and ACS

**www.bosch-repair-service.com/en/warranty/**

**More security in everyday workshop life**

Should a malfunction occur, downtime can quickly lead to extended repair times and costly delays. The Bosch 5-year care-free promise ensures high planning reliability. Workshops benefit from an extended warranty* of up to five years for purchased or leased** devices such as KTS Truck, DCU, FSA, and BAT. In addition to repairs, the warranty also covers calibration and software updates. Replacement with original parts is also included, at no additional cost. This eliminates numerous organizational tasks, like annual inspections, allowing workshops to fully concentrate on their day-to-day business.

**Clear advantages for daily use**

Through this extended warranty, Bosch solidifies its position as a reliable partner for workshops. All services are included as part of the warranty – without the need for extra applications, scheduling, or additional costs. Workshops gain both financial and operational dependability.

**Contributes to increased customer satisfaction**

The Bosch 5-year care-free promise helps ensure smooth, on-time repair processes. After all, what truly matters is the reliable availability of essential workshop equipment, enabling any workshop to deliver on its commitments.

* Terms and conditions of the warranty: https://www.bosch-repair-service.com/img/products/media/agb-warranty.pdf

**The 5-year peace-of-mind warranty in combination with leasing is only possible via the authorized Bosch retailer and our partner Süd Leasing ALVG Anlagenvermietung (Applies to Germany only). Current Bosch leasing conditions are available on request from your authorized Bosch retailer.


DCU 220, KTS Truck, DCU 150 – typical diagnostic technology for CV workshops

# ESI[tronic]: VIN readout with just one click

## Continuously updated diagnostic software: fast VIN readout and new topology view

Using comprehensive and reliable ESI[tronic] diagnostic software suitable for all types of commercial and off-highway vehicles, workshops can choose between four licensable data packages – or even combine them if required: the truck package (light and heavy commercial vehicles, trailers, vans, and buses), the agricultural-vehicles package (OHW 1), the construction-vehicles and engines package (OHW 2) and the material-handling package (OHW 3). ESI[tronic] software is used on KTS Truck diagnostic devices combined with a workshop laptop such as the new DCU 150 tablet PC or the DCU 220 convertible notebook.

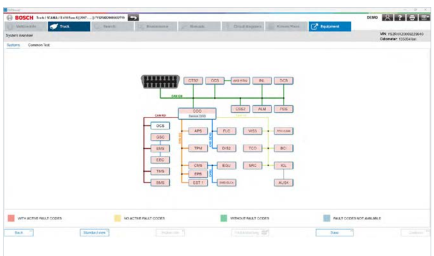

ESI[tronic] on DCU 150: fast vehicle identification with new direct search

**Intuitive operation and always up to date**

ESI[tronic] is known for its intuitive operation. This allows workshops to work particularly quickly and efficiently. Thanks to regular software updates, the integration of new vehicle data, and continuous addition of new functions, users always stay up to date concerning professional servicing of commercial vehicles.

**Vehicle identification via VIN**

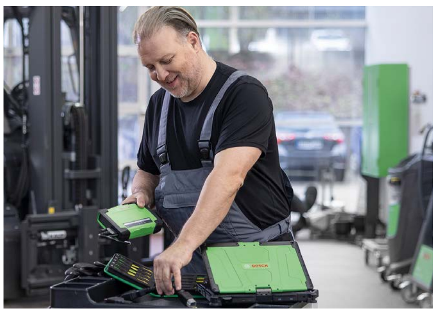
Direct VIN readout is a recently added feature. To identify a commercial vehicle, users can enter vehicle details, key numbers, or the even the VIN (vehicle identification number). By means of this new software function, VIN readout and unambiguous vehicle identification are now performed practically “at the touch of a button.” This allows precise assignment of relevant vehicle data – such as model, engine, and equipment – within the diagnostic system. As a result, diagnoses become even more accurate and optimal repair procedures can be applied for every truck and OHW. The new function is supported by KTS Truck devices of the generations 2 and 3.



Topology view in ESI[tronic]

**What’s where? The new topology view**

To efficiently perform repair and maintenance tasks on modern commercial vehicles, a profound understanding of vehicle architecture and systems is essential. To support this, ESI[tronic] has been enhanced by a new topology view. This function displays the complete vehicle network at a glance – in detail, color-coded, and including system status. For faster diagnoses, the topology view now clearly and intuitively visualizes sophisticated vehicle electronics and systems as well as their connections. Color coding simplifies fault detection. By a single click on a system, users can now access detailed information and diagnostic functions, making navigation even easier. At the same time, it is possible to flexibly switch between the well-known view and the new topology view. The topology view is already available for many vehicles.



Software and hardware for the workshop

# Diesel future: HVO and double injection

## Bosch continues to work on innovative solutions for commercial vehicle drives – on- and off-highway

Over one million new construction vehicles will be produced worldwide in 2025 alone. As different as their performance classes and tasks are, they almost all have one thing in common: a diesel engine. Its robustness and strength make it the ideal powertrain for a wide range of applications. Bosch is showing how emissions can be reduced even further in this vehicle segment. Many new and existing vehicles are already operated by renewable synthetic fuels.

**Renewable synthetic fuels in combustion engines**

Construction vehicles are already subject to comprehensive exhaust-emission regulations, such as Stage V in Europe, Tier 4 in the U.S., and Phase IV in China. To date, however, their climate-relevant emissions have been regulated only to a limited extent, at least by law. One simple option for greatly reducing their carbon emissions that is already available today is to use renewable synthetic fuels such as HVO100. Because these fuels are based on residual and waste materials, they are much more climate-friendly than fossil fuels in terms of overall carbon emissions. They are also “drop-in” fuels, meaning they can be mixed with normal diesel fuel as required. Since Bosch already takes compatibility with these fuels into account when developing its injection technology, they are suitable for use in its products. However, the specifications and approvals of the respective vehicle manufacturers always apply.

**Newly developed: Exhaust-gas treatment with double injection technology**

According to Bosch forecasts, four out of five new construction vehicles worldwide with over 56 kilowatts will still have a diesel engine in 2035. That is why Bosch will continue to develop injection technology and urea dosing technology for exhaust-gas treatment in the future to suit the various segments of the construction machinery market. Exhaust-gas treatment with double-injection technology is a system for efficient catalytic reduction of nitrogen oxides for commercial vehicles. In combination with effective temperature management, SCR-based exhaust-gas treatment reduce nitrogen oxide emissions even further. Bosch has developed a SCR technology called DI-SCR that uses a double injection of urea. With this system, a quantity of urea – the exact amount depends on the current driving situation – is injected into a catalytic converter situated close to the engine as well as into another catalytic converter located further away from the engine. DI-SCR helps commercial vehicle manufacturers and fleet operators to also maintain compliance with emission requirements that are expected in the future. Already shortly after engine start and also in low-load situations the system ensures less emission of NOx. At the same time the high system robustness helps to reduce the emissions over the lifetime.

**Exhaust-gas treatment with double injection technology**

While double injection is primarily used in new vehicles, retrofitting existing commercial vehicles is also of great interest. Currently, adaptation requires profound and complex modifications. Bosch is continuously working on modular solutions for the aftermarket to extend the life cycle of commercial vehicles and improve their environmental performance.

# Testing and repairing Denoxtronic systems

## Increased service demand for exhaust-gas treatment systems in the commercial vehicle sector

Although the importance of alternative powertrains for commercial vehicles is slowly increasing, the diesel engine will remain the predominant powertrain in the transport sector for the foreseeable future. This creates the need to optimally test and repair modern exhaust-gas treatment systems, such as the Bosch Denoxtronic system. Proper system functionality is not only critical for complying with stringent emission regulations, but it also ensures the vehicle‘s economic operation. For commercial vehicle workshops, this creates growing revenue potential.

Deposits on the spray nozzles can affect the functionality of the dosing module, leading to poor spray patterns or even complete component failure.

**Tried and tested millions of times out in the market**

Since Denoxtronic 1.1 was first launched in 2004, approximately 18 million Denoxtronic systems have been installed in a wide range of commercial vehicles worldwide – from trucks and construction machinery to stationary diesel generators. This impressive market penetration illustrates the growing service demand for these systems, particularly for the newer generations 6.5 and 6-HD with their high mileage. Consequently, there is also an increasing demand for value-based repairs and cost-effective maintenance solutions.

**Competence from a single source**

In addition to the right know-how, workshops performing comprehensive Denoxtronic service also need the proper technical equipment. As a leading system supplier, Bosch offers a complete solution for this purpose. The range includes training, powerful diagnostic equipment for accurate troubleshooting, and special tools like the Denoxtronic test case. These tools allow technicians to test components of the Denoxtronic exhaust-gas treatment system while still installed, enabling the quick identification of defective parts.

**Value-based repairs**

Bosch also provides its own service program for value-based repairs. Components are inspected according to manufacturer specifications, and defective parts are replaced or repaired. For older commercial vehicles in particular, repairing a defective Denoxtronic supply module, for example, is an economic alternative to a complete replacement. Bosch provides special tool and upgrade sets for this purpose.

Denoxtronic filters must be replaced regularly. On the Denoxtronic 2.1, it is bolted to the housing cover of the supply module.

# Jochen Hahn once again takes the ETRC vice-championship title


**Bosch inside 2025 Hahn truck**

- batteries
- crankshaft sensor
- camshaft sensor
- common-rail system
- fuel-filter replacement box
- fuses
- heavy-duty alternator
- intake-manifold pressure sensor
- oil filter
- relays
- ribbed V-belts
- wiper blades

Photo: Bartscher/Team Hahn Racing

## Team player Hahn secures second place on both team and driver standings

Under ideal racing conditions, the grand finale of the 2025 Goodyear FIA European Truck Racing Championship (ETRC) took place last weekend at the Circuito del Jarama in Spain. With sunny skies and temperatures of up to 28 °C, Jochen Hahn once again showed up being in peak form. Although he had already secured vice-championship title prior to the final round, the experienced truck racer didn't miss the opportunity to finish the season with a strong performance. At the first race on Saturday, Hahn started from second position – and confidently maintained that place all the way

Photo: Bartscher/Team Hahn Racing

Jochen Hahn: "Truck racing is teamwork."

across the finish line, thus once again proving his impressive consistency throughout the season. At the second race, Hahn supported his teammate Steffi Halm in her battle for third place on the driver standings. Running directly behind her, he successfully blocked all attacks from her competitors. Halm secured third place at this race and thus gained valuable points.

**Strong team results on the overall standings**

"I'm proud of my team and our season. Even before coming to Spain, we already knew our second place on the overall standings was safe – but I wanted to finish the year cleanly, as a team player, and once again showing how strong we are. And that's exactly what we achieved," Jochen Hahn said after the race.

**www.team-hahn-racing.de**

**Imprint**

**Published by:**
Robert Bosch GmbH
Auf der Breit 4
76227 Karlsruhe
Germany

**Editor:**
Denise Geiger Cardoso

Errors and omissions excepted

**www.bosch.com**