


Truck World

A Bosch magazine for the aftermarket | edition 38 | March 2024

The systems' bodyguards

Bosch filters do not only protect important commercial-vehicle components, but they even protect the vehicle occupants



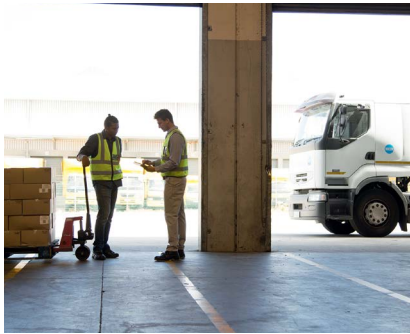
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EDITORIAL

BOSCH – A STRONG PARTNER FOR CHALLENGING TIMES



Dear truck fans,

always keep moving! This intent is well known to truckers and workshops. Higher requirements resulting from technological changes and market trends can pose challenges. Under these circumstances, it is helpful to be able to rely on a partner who offers a comprehensive range of technical spare and service parts. Bosch considers various drive concepts and age groups of commercial vehicles. In this issue, we report on filters, tool kits for exhaust-gas treatment systems and Bosch eXchange parts.

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

Your commercial-vehicle team

Dates: 2024 FIA ETRC

Misano	May 25 – May 26
Slovakia Ring	June 8 – June 9
Zolder	June 22 – June 23
Nürburgring	July 13 – July 14
Most	Aug. 31 – Sept. 1
Poznań	Sept. 14 – Sept. 15
Le Mans	Sept. 28 – Sept. 29
Jarama	Oct. 5 – Oct. 6



Reliable filtration

Bosch filters for CVs

Professionally operated commercial vehicles need to stay on the roads – because the costs keep running during downtimes. In cases of repair and maintenance, workshops must be able to rely on high quality and fast delivery. The extensive Bosch filter program is designed to meet these demands.

Using high-quality materials, meticulous processing and strict product controls – in line with the same standards applied to original equipment parts – Bosch filters ensure top quality. As a developer and manufacturer of diesel and Denoxtronic injection systems, Bosch precisely understands the requirements placed on commercial vehicle filters. Moreover, Bosch also relies on its comprehensive expertise. The Bosch range is continuously updated. It covers all of the major commercial vehicle and

engine types. With its international distribution and logistics network, product availability is particularly high. Furthermore, Bosch supports wholesalers and workshops as a strategic partner with suitable diagnostic solutions and trainings.

DIESEL FILTERS

Bosch diesel filters protect the injection system. They reliably separate particles and water from fuel and contribute to optimum engine performance. In commercial vehicles, water separators are often used for prefiltration due to the high flow rate, while diesel filters handle fine filtration.

OIL FILTERS

Bosch oil filters protect the engine and its components, such as e.g. turbochargers. They reliably



remove soot and metal particles from engine oil. Bosch bypass filters are specifically designed to separate very fine particles – mainly soot particles which accumulate over time. This maintains the lubricity of the oil and makes sure it effectively reaches the places to be lubricated.

AIR FILTERS

Bosch air filters contribute to the proper functioning of sensors installed at the engine's intake tract. They reliably separate particles from the intake air thus allowing the engine to deliver its optimum performance. On average 10,000 liters of clean air are needed for the combustion of one liter of fuel. Considering these requirements, high quality pays off quickly. Bosch air filters stand out for the use of microporous filter media, a high number of pleats and the use of high-quality sealing materials. The multi-layered, specially impregnated filter medium ensures a long service life, a high particle separation rate as well as high moisture resistance and

tensile strength. The large filter surface with embossing also increases the dust holding capacity and reduces the flow resistance.

CABIN FILTERS

Commercial vehicles are workplaces. Therefore, the health protection of vehicle occupants is paramount. Bosch cabin filters protect against pollen and fine dust. In addition, activated-carbon filters also separate foul-smelling and harmful gases – such as ozone or smog.

DENOXTRONIC FILTERS

Bosch Denoxtronic filters protect the Denoxtronic injection system. They reliably separate particles contained in AdBlue and support optimum AdBlue dosing.

SPECIAL FILTERS

For special tasks, Bosch also offers special filters – from air dryer cartridges to coolant and hydraulic oil filters through to oil mist separators.

REPLACEMENT

INDIVIDUAL REPLACEMENT INTERVALS FOR EACH FILTER



Regular inspection and replacement of filters help to keep vehicles safer on the road. The service intervals specified by the vehicle manufacturers should be observed strictly. In addition, Bosch also recommends replacement intervals based on its own manufacturing experience.

Diesel, oil, air, hydraulic oil and Denoxtronic filters

Replacement interval: as specified by the vehicle manufacturer

Cabin filters

Replacement interval: every 120,000 km or at least once a year – the manufacturer's specifications must be observed

Air dryer cartridges

Replacement interval: annually

Coolant filters

Replacement interval: regularly, together with the oil filter

Oil mist separators

Replacement interval: every 40,000 km for short distances, every 80,000 km for long-distance travel



Find additional information at the filter catalog



Bosch commercial vehicle filters are available worldwide for leading brands:

DAF, FORD, IRISBUS, IVECO, MAN, MERCEDES-BENZ, MITSUBISHI, MITSUBISHI FUSO TRUCK & BUS, NISSAN, RENAULT, SCANIA, TEMSA, VOLVO



Denoxtronic repairs on commercial vehicles



Denoxtronic 2.2 tool set

Around 18 million Denoxtronic systems are in operation worldwide – in trucks, construction and agricultural machinery as well as in stationary installations with diesel generators. Due to their high mileage, the need for service and demand for cost-effective repairs of Denoxtronic systems is increasing. These systems, which use Adblue to convert harmful nitrogen oxides (NOx), are important components of the exhaust-gas treatment due to increasingly stringent emission standards.

COMPREHENSIVE BOSCH SERVICE SUPPORT

The number of installed systems presents an opportunity for commercial vehicle workshops to generate service turnovers. For vehicle diagnosis, Bosch offers Denoxtronic test sets in a practical suitcase as well as the KTS Truck diagnostic tool. These tools allow testing of components without having to remove them first and quick identification of faulty parts. Bosch also offers an extensive

product range for replacement. Supply modules are also available as Bosch eXchange products.

REPAIR SETS FOR DENOXTRONIC SUPPLY MODULES

Depending on the age of the commercial vehicle, another cost-effective solution comes into play – removal and repair of defective Denoxtronic supply modules. For this purpose, Bosch provides the Denoxtronic 2.2 tool set and an Denoxtronic 2.1 to 2.2 upgrade set. All functional tests can be performed on the removed components by means of special tools including Bosch diagnostic equipment such as the KTS 560/590 and the tool sets. Diagnostic and repair instructions included in ESI[tronic] Evolution provide the required data for this purpose.



Denoxtronic 2.1 to 2.2 upgrade set

KTS TRUCK AND DCU 220

For comprehensive diagnoses on commercial vehicles – in collaboration with ESI[tronic] Evolution.



Bosch Denoxtronic workbench for all Denoxtronic maintenance tasks

BOSCH KTS 560/590

Diagnostic tester and ESI[tronic] Evolution guide the user through the component repair.



10 years of Alltrucks: workshop network for commercial vehicles



Around 700 Alltrucks partners offer multi-brand services for CVs in 16 European countries.

Celebrating the 10th anniversary of the Alltrucks commercial vehicle workshop concept, representatives of Alltrucks partner workshops, cooperation and service partners and the founding companies met in Fulda. Since its foundation, Alltrucks has been committed to continuous development. However, the focus in Fulda was not on the past but rather on current trends and the future of the workshop business. Several presentations addressed topics such as alternative drive technologies, remote diagnostics for commercial vehicles and legislative changes.



Bosch is a reliable partner for commercial vehicle workshops – and will be in future

THE ALTERNATIVE FUTURE

Jan Hollmann, Regional President Europe & Middle East at Bosch Mobility Aftermarket, spoke about the impact of electrification and fuel-cell technology on the commercial vehicle sector. A new era of mobility is currently being shaped. In this regard, Bosch is a partner for vehicle systems, software and services – and one of the leading technology suppliers worldwide. Current trends on the mobility market – such as electrification – do not only change the electrical/electronic architecture of vehicles. These developments also influence the workshop business. Jan Hollmann commented on this as follows: “The Alltrucks partner event was a great success. When it comes to future opportunities and challenges in the commercial vehicle workshop business, Alltrucks is moving into the right direction. Bosch will continue to actively support this development in future.”

THE ETM SURVEY

THREE ETM BEST BRAND AWARDS FOR BOSCH PRODUCTS



Andreas Wegner (m), Channel Manager Truck, Robert Bosch GmbH, received three awards.



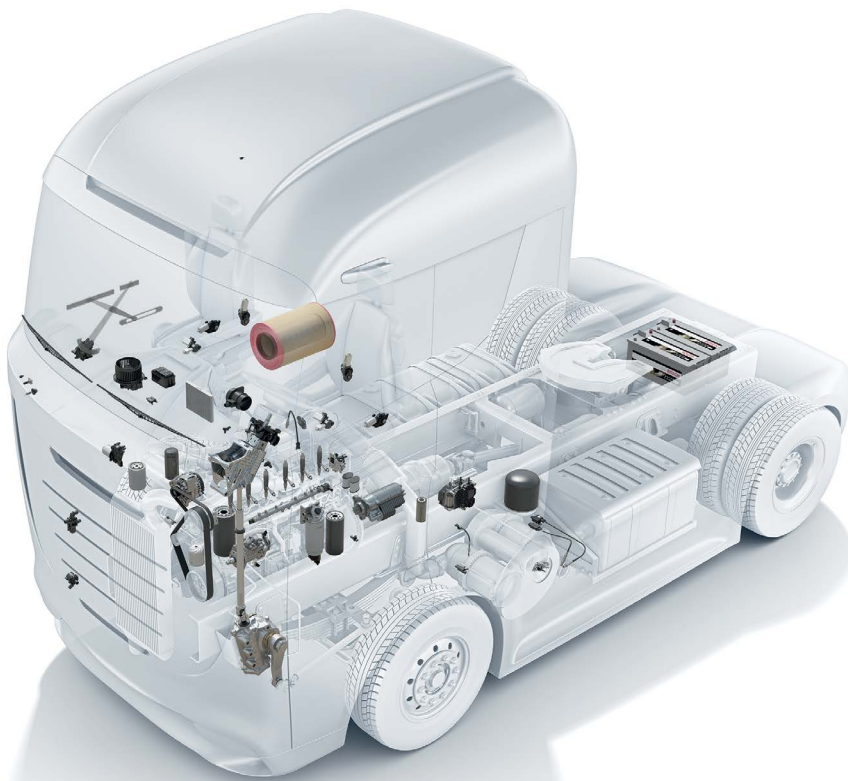
BOSCH AWARDED IN THREE CATEGORIES

For the 10th time, WERKSTATT aktuell relied on the expertise of workshop and service experts for its readers' poll. 249 brands in 21 categories* competed in the field of CV servicing for the "Best Brands 2023". 1,020 workshop experts took part in the poll and voted Bosch products number one in the categories of **A/C service units, test and diagnostic equipment** as well as **workshop software**.



*Find additional details on the readers' poll, at www.eurotransport.de

Additional Bosch spare parts for commercial vehicles



Bosch spare parts for commercial vehicles

Commercial vehicles are equipped to cope with constant and continuous strains. Pneumatic and hydraulic systems support many functions by permanently providing the huge forces needed. Filtering hydraulic oil or compressed air, hydraulic oil filters and air dryer cartridges make sure these systems work reliably. Concerning commercial vehicles for passenger transport, the focus is on protecting the occupants. In buses, cabin filters at the A/C systems thus play a particularly important role.



HYDRAULIC OIL FILTERS FOR TRANSMISSIONS

Hydraulic oil allows the transmission of very high pressures within hydraulic systems. This is particularly useful for agricultural, forestry and transportation purposes. Bosch hydraulic and automatic transmission filters protect the hydraulic system against contaminants such as dust, metallic debris and water.



AIR DRYER CARTRIDGES

Operating and parking brake systems, air suspension, door operation e.g. in buses, and traction control are pneumatically supported. In commercial vehicles, Bosch air dryer cartridges reliably dehumidify compressed air within the pneumatic system and separate particles and oil mist.



CABIN FILTERS FOR A/C SYSTEMS IN BUSES

Modern buses are equipped with air conditioning systems. These systems circulate and clean the air using cabin filters. Bosch provides particle filters for A/C systems in buses. These filters must be replaced regularly, according to the intervals specified by the manufacturers – at least every six months or every 60,000 km.

Circular economy in the Bosch eXchange program



A selection of Bosch commercial vehicle parts are also available as Bosch eXchange parts.

For commercial-vehicle workshops, it is becoming increasingly important to consider a vehicle's age and therefore its fair value in relation to its purpose in the customer's fleet as a whole. Bosch eXchange offers a wide range of replacement parts for the repair of commercial vehicles in line with their current value. This supports commercial vehicle workshops to meet their customers' demand for high-quality, value-based vehicle repairs. Peter Lukassen, responsible for the operative sustainability at the Bosch Mobility Aftermarket division, answers questions about the sustainability strategy of Bosch eXchange.

Question: Reuse of products supports the sustainable use of natural resources. How important is circular economy for Bosch and how does Bosch Mobility Aftermarket contribute to this

PL: For decades, circular economy has been a key component of the aftermarket offer. Circular business models are not only more sustain-

able, but also more robust. Accordingly, they are ever more important. Bosch has already developed different solutions within its program and will continue to expand them even further. As interface towards the market, the Mobility Aftermarket division sees its task in aligning the circular economy and its different business models with one another thus making them twice as sustainable.

Question: Value-based repairs are in higher demand than ever before – and not only for older vehicles. Why should workshops choose Bosch eXchange products?



Peter Lukassen, head of the sustainability department

PL: Sustainability means using things as long as possible and as long as it makes sense. However, as the age of the vehicles increases, the purchase of new replacement parts becomes more difficult and more expensive. For many years, Bosch eXchange has been offering the possibility of carrying out value-based and sustainable repairs of high quality. The importance of exchange programs for long-term maintenance of vehicles increases concomitantly with the growing electrification of vehicles and components. Based on the comprehensive understanding of systems, Bosch eXchange is consistently and continuously further developed in line with the customers' requirements. As partner of workshops, Bosch foresees a huge, common and sustainable business potential in this field.

Question: Diesel engines dominate the commercial vehicle segment. However, the relevance of electric drives is expected to increase gradually. What about the future perspectives?

PL: Bosch eXchange has evolved over the years just as the vehicles did. As Bosch complemented its portfolio including exchange parts for diesel direct injection in addition to distributor pumps, solutions for future forms of mobility will also be developed.

FIA ETRC 2024: New challenges

BOSCH INSIDE 2024 HAHN TRUCK

- batteries
- crankshaft sensor
- camshaft sensor
- diesel injection system with EDC7U control unit and unit injectors
- 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

Everything for equal opportunities: aerodynamic conversion of Jochen Hahn's race truck according to the FIA ETRC regulations.

Tasks for 2024: Title and new e-truck regulations

Adjustments to the ETRC (European Truck Racing Championship) regulations over the season break are common. But this time, the modifications were really substantial. In order to give all participants equal opportunities, to eliminate advantages due to different CW values and to increase safety at the same time, the FIA made significant changes to the regulations in the field of aerodynamics. This meant, different parts of the front axle geometry had to be modified in order to prevent any damage to the suspension. Team Hahn Racing even thought about building a new race truck. Due to the huge potential of the existing vehicle, however, Hahn will continue



Lukas Hahn

running for the ETRC title in 2024 with the same truck – but after some extensive upgrading.

Lukas Hahn runs on his own brand

Lukas Hahn's development as an independent truck racer is progressing. He will start at the races in Zolder and on Nürburgring. This season, he will drive with the support of his new sponsor and with his own truck design.

The new e-truck racing is emerging

The first test phase of the e-truck built by Team Hahn Racing has been completed. It will be seen at demos and show rides in Misano, on Nürburgring and at the IAA. The regulations are currently being developed together with the FIA. This implies safety for drivers, spectators and on the racetrack as well as a new charging infrastructure. Practically everything will be different. But one thing will definitely remain: motor-sport fascination at its best.

www.team-hahn-racing.de

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