

Truck World

A Bosch Automotive Aftermarket magazine | edition 32 | March 2022

Team Hahn Racing and Bosch

More than ten years of successful partnership between the six-time European champion and Bosch – a story of success



Photo: Bartscher/Team Hahn Racing

Strong partner

Bosch spare parts and services

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Quality pays off

Better rely on Bosch fuel filters

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An old flame never dies

Bosch Classic range for classic trucks

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EDITORIAL

TRUCK WORLD: REPORTS ON PARTS, TRUCKS AND RACES



Dear truck fans,

When Bosch and Team Hahn Racing first started their partnership in 2011, the Truck World magazine published a front-page article about it. After all, Jochen Hahn had just won his first out of six titles as European Truck Racing Champion. Ever since, the Truck World Magazine has regularly been informing its readers about exciting truck-related topics. These include new Bosch products and tips & tricks concerning diagnoses on as well as repair and maintenance of commercial vehicles. And, last but not least, there has always been an article on truck racing and Jochen Hahn as well.

On behalf of the commercial-vehicle team, I wish you an enjoyable read and a great journey into the connected workshop future!

Best wishes, Tobias Weiss

Dates: 2022 FIA ETRC	
Misano	May 21 – May 22, 2022
Hungaroring	June 11 – June 12, 2022
Slovakia Ring	July 2 – July 3, 2022
Nürburgring	July 16 – July 17, 2022
Most	Sept. 3 – Sept. 4, 2022
Zolder	Sept. 10 – Sept. 11, 2022
Le Mans	Sept. 24 – Sept. 25, 2022
Jarama	Oct. 1 – Oct. 2, 2022



Sponsored by Bosch

Partnership with Team Hahn Racing

By the time the partnership between Jochen Hahn and Bosch started, he was already a successful truck racer. More than 25 years ago, in 1996, his father Conny – by then salesman at the Köngen Nutzfahrzeug-Center (NGC) – accepted a Mercedes-Benz race truck withdrawn from service together with its respective trailer in payment. In 1997, once the truck had been reconditioned, Team Hahn Racing started into its first ETRC season. At a race in Zolder (Belgium) in 1999, Hahn finished a race ranking third before he crashed into a wall at a speed of 156 km/h at the subsequent race. His race truck was completely destroyed. Luckily, Hahn himself remained unharmed.

LIKE FATHER, LIKE SON

Ever since, Conny Hahn acted as team manager. The new team pilot, his son Jochen, started off with a sensation:

At the end of the 2000 season, he already ranked fourth on the ETRC standings and was voted “Rookie of the Year”.

EUROPEAN TRUCK RACING CHAMPIONSHIP (ETRC)

Jochen Hahn soon found his place among the top pilots of the European Truck Racing Cup and as of 2006, once the series was leveled up, also of the European Truck Racing Championship (FIA ETRC). He thus contributed to the increasing popu-



2011: Jochen Hahn wins the ETRC

larity of this motorsport series – by now one of the most popular series in Europe besides Formula One. Over the years, the spectators voted the friendly race driver from Altensteig “most beloved race driver of the FIA ETRC” numerous times. On October 9, 2011, he received his biggest reward on Circuit Bugatti in Le Mans (France).



2011: Partnership with Bosch

Pushing his 1,200 HP close-to-production 5.5-ton MAN race truck across the line, he made it: Jochen Hahn, the new European Truck Racing Champion.

SPONSORED BY BOSCH

As a global developer and producer of commercial-vehicle technologies, Bosch contributes to the success of Team Hahn Racing. The successful race trucks are supported by the complete Hahn family and highly motivated technicians absolutely determined to winning races. Besides technical high-quality equipment, this also includes workshop know-how. For more than 10 years, Bosch has been supporting the racing team by means of its broad portfolio. This includes batteries, diesel injection



2019: On his Iveco race truck, Hahn wins his 6th ETRC title yet before the end of the season

systems, alternators, filters, relays, sensors and wiper blades used in Jochen Hahn's race trucks, but it also includes Bosch Power Tools equipment used at the Hahn Racing workshop. As Jochen Hahn stated: “Bosch and Hahn combine well.” After all, he achieved his first ETRC title in 2011 already partnering with Bosch. Additional title victories followed in 2012, 2013, 2016, 2018 and 2019. His six ETRC titles turned Hahn into the most successful truck racer in Europe.



Jochen and Lukas Hahn

3RD GENERATION: LUKAS HAHN

His son Lukas also started off as an active race pilot. At his first season in 2019, he achieved three podium finishes. And there is also further developments towards a future with less emissions at the series: As of June 2021, FIA ETRC uses synthetic HVO diesel fuels made of hydrated vegetable oils. The series will remain thrilling. Stay tuned.

BOSCH INSIDE 2022 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

FILTER CATALOG

ALL FILTERS FOR TRUCKS: QUICK, EASY AND NEATLY ARRANGED



EU filter catalog for commercial vehicles, issue 2022/2023, order No. 1 987 720 042

NEW EU FILTER CATALOG AS PRINT OR PDF VERSION

The user-friendly layout of the new EU commercial-vehicle filter catalog eases the quick identification of the matching filter. By means of a quick and accurate search, users will find all required information at a glance. If there are several Bosch filters available, this also includes the OE number, for instance. In addition, the catalog also features foot notes comprising useful additional information about the respective products. In case of oil filters, for example, this can be the specification of the filter as main or bypass filter. The PDF version including book marks for quick and easy navigation



Have a look at the catalog!



Bosch filters range for commercial vehicles

between different vehicle makes is available for download at the Bosch website:

Have a look at the

Bosch – a strong partner for spare parts

New series!



BOSCH COMMERCIAL-VEHICLE COMPONENTS

As an OE supplier, Bosch supplies commercial-vehicle manufacturers worldwide with components and solutions. This expertise is also a significant benefit for the aftermarket. Providing a broad range of robust high-quality spare parts, Bosch is a reliable and constant workshop partner for the complete vehicle life cycle.

The Bosch spare parts range for commercial vehicles comprises new parts, Bosch eXchange replacement parts and repair solutions. It thus covers the specific requirements of different application purposes based on the current value of the respective vehicle.

At the upcoming editions of the Truck World Magazine, one after another of the individual spare part categories of the green box below will be presented more in detail.

Bosch components and spare parts for commercial vehicles

ENERGY MANAGEMENT

- ▶ Alternators
- ▶ Batteries
- ▶ Ribbed V-belts
- ▶ Starters

ENGINE MANAGEMENT

- ▶ Air filters
- ▶ Air-mass meters
- ▶ Camshaft-position sensors
- ▶ Centrifugal oil filters
- ▶ Common-rail high-pressure pumps
- ▶ Common-rail injectors
- ▶ Coolant filters
- ▶ Crankshaft-speed sensors
- ▶ Diesel fuel filters
- ▶ Diesel water separators

- ▶ Intake manifold boost-pressure sensors (MAP)
- ▶ Oil filters
- ▶ Oil mist separators
- ▶ Rail pressure sensors
- ▶ Rails
- ▶ Temperature sensors

EXHAUST-GAS TREATMENT

- ▶ Denoxtronic dosing modules
- ▶ Denoxtronic filters
- ▶ Denoxtronic supply modules
- ▶ Depatronic injection units
- ▶ Depatronic metering units
- ▶ Differential pressure sensors
- ▶ Exhaust-gas temperature sensors
- ▶ Lambda sensors
- ▶ Nitrogen oxide sensors (NOx)

- ▶ Particulate matter sensors

LIGHT AND VISION

- ▶ Automotive bulbs
- ▶ Interior bulbs
- ▶ Turn signal bulbs
- ▶ Wiper blades

STEERING SYSTEMS

- ▶ Hydraulic oil filters for steering systems
- ▶ Pitman arms
- ▶ Pressure limiting valves
- ▶ Servocom steering systems
- ▶ Steering columns
- ▶ Steering pumps
- ▶ Steering shafts

VEHICLE ELECTRONICS

- ▶ Blower motors
- ▶ Electric water pumps
- ▶ Flap actuators
- ▶ Relays
- ▶ Seat actuators
- ▶ Solenoid valves
- ▶ Window lifters
- ▶ Wiper motors

OTHER SPARE PARTS

- ▶ Air dryer cartridges
- ▶ Cabin filters
- ▶ Hydraulic oil filters for transmissions

Commercial-vehicle services, trainings and diagnoses



Commercial-vehicle workshops need to get the vehicles ready for action as quick as possible.

Whether for diagnosing, testing, maintenance or repairing, Bosch workshop equipment and services support the increase in efficiency of commercial-vehicle workshops. This is as true for sophisticated cases of repair as for everyday routine diagnoses. Workshops can rely on the gathered know-how, the technological expertise and the comprehensive range of practical experiences Bosch gained in decades of successful support for automotive workshops. For this purpose, Bosch provides a wide range of workshop equipment and technical trainings for maintenance and repair of commercial vehicles.



Testing and maintenance of the Bosch Denoxtronic exhaust-gas treatment system

HIGH-QUALITY DIAGNOSES

Special equipment for commercial vehicle workshops is not only state of the art, it was also developed to meet the high demands Bosch places on its quality. Most of these devices



Commercial-vehicle diagnosing and testing

can be linked to each other via Bosch Connected Repair. This allows for fast data exchange and increased workflow efficiency. The comprehensive product range covers different areas reaching from ECU diagnoses, battery servicing and calibration of driver assistance systems through to A/C servicing, testing, repair and replacement of diesel components, exhaust-gas analyses – including

particle counting – and vehicle system analyses. Large parts of this intuitive and user-friendly test equipment is controlled by means of Bosch ESI[tronic] 2.0 Online diagnostic software. This allows commercial-vehicle workshops to prepare for both current and future challenges.

TRAINING: KNOW HOW

At the Bosch Service Training Center, workshops benefit from the expertise of highly qualified trainers featuring a wealth of branch-specific experience. The range of trainings comprises courses on commercial-vehicle technologies such as exhaust-gas treatment, diesel injection technology, electrics and electronics of comfort systems, sensor testing, trailer PIN and use of KTS-series diagnostic testers. Face-to-face trainings are complemented by live webcast trainings. At this format, the trainers teach their comprehensive know-how at practical examples in a virtual environment. The participants are informed on the vehicle systems and suitable Bosch products. Their questions are answered right at the live webcast event.

www.boschaftermarket.com



Practical training using Bosch test equipment

Bosch fuel filters in comparison: quality pays off



Bosch diesel filters with prefilters and water separators for commercial vehicles

BEWARE OF CHEAP FUEL FILTERS!

On average, trucks travel 145,000 km every year. They are constantly on the move. For their fuel filters, this means constant strains and highly varying fuel quality in different countries. Only high-quality filters provide stability and both a long and reliable service life while protecting the engine and its components. Using low-quality filters can result in power drops and engine standstill. It can even affect the fuel supply or lead to internal corrosion of engine components. Such risks, no professional is willing to take! Operators seeking to avoid expensive downtimes don't make any compromises and thus rely on Bosch fuel filters.

USE BOSCH FILTERS, BE SAFE

Bosch's high-quality fuel filters protect the injection system and contribute to optimum engine performance. Thanks to their multiple layers of microporous filter medium, they reliably separate both particles and water. This prevents early wear, mechanical friction and corrosion. The large surface of the filter medium provides a high dust retention capacity and reduced flow resistance. The filters' high-quality processing ensures internal and external integrity. Depending on the application, the main filter function can be supported by a water separator. It reliably removes large amounts of water from fuel. This ensures a long main-filter service life and reduces the operating costs.

IN COMPARISON: BOSCH FILTERS AND LOW-QUALITY FILTERS

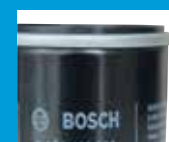
Bosch filters



Large dirt-holding capacity through high number of pleats



Reliable filtration thanks to stable pleat geometry



Corrosion-resistant housing prevents fuel leakage



Stable connection of the end pleats



High-quality sealing made out of a special rubber prevents any fuel leakage

Low-quality filters



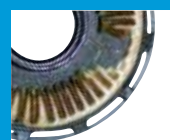
Small number of pleats
▶ Increased wear of the engine caused by particles
▶ Reduced service life



Unstable pleat geometry
▶ Insufficient fuel filtration
▶ Increased wear of the engine



Corrosion caused by spray water
▶ Hazards caused by leaking fuel
▶ Environmental pollution caused by leaking fuel
▶ Reduced service life



Bypass of unfiltered fuel caused by the missing connection of the end pleats
▶ Increased wear of the engine



Damaged, porous sealing
▶ Hazards caused by leaking fuel
▶ Environmental pollution caused by leaking fuel

Not old hat: service for classic commercial vehicles



“Installation hall” of a Bosch Service workshop in 1958

Although the number of classic cars exceeds that of classic commercial vehicles, there are many fans of classic buses, dump trucks, ambulances, cranes and fire engines. This group often consists of former drivers, operators, haulers and mechanics. Former “workhorses” among the vehicles are often in much worse condition than classic cars owned by private individuals. Auxiliary vehicles such as fire trucks, for instance, represent an exception to this rule. Since they have only been used in cases of emergency, they often feature a rather low mileage – despite their age.



Black Bosch Classic battery

BOSCH CLASSIC SERVICES

Bosch provides a series of spare parts for historic commercial vehicles. There is, for example, a comprehensive range of components specifically for the mainly diesel-powered commercial vehicles. It also includes a selection of diesel pumps and spare parts for pump repairs. Visiting a Bosch Classic workshop can thus pay off. These businesses are specialized on the maintenance and repair of historic vehicles.



Bosch Classic relay

UNIVERSAL SPARE PARTS

Everything related to electrics often turns out to be a challenge for owners of classic vehicles. Bosch Classic and its range of spare parts, however, are particularly well prepared for this topic. Parts of this range have even been relaunched – i.e. genuine historic design equipped with state-of-the-art technology. This includes, for instance, the black 12-volt batteries which can be



Fendt F225GT equipment carrier (1961–1965) with Bosch glow indicator, push button, rotary switch for the lights, pull switch and glow-plug starter switch

combined for use in 24-volt systems. The portfolio is completed by universal – not vehicle-specific – accessories and spare parts. These include wiper blades, filters, relays and switches for turn signals, brake lights, brake pressure, glow-plug starters, hazard warning lights, headlights, oil pressure, wipers and wiper-intervals.

www.bosch-classic.com



Bosch Classic switches

Bosch V-belts for CV: resilient and safe



Particularly resilient and featuring a high operational reliability: Bosch ribbed V-belts

Bosch quality for high performance on the road

Vehicle standstills caused by breakdowns and repairs cost money. Torn V-belts are a frequent cause of commercial-vehicle engine breakdowns. Bosch ribbed V-belts are particularly resilient and feature a high operational reliability and a long service life reducing expensive downtimes. This contributes to profitable fleet operation.

EXPERIENCE IN DEVELOPMENT AND PRODUCTION

As one of the world's largest developers and manufacturers of automotive products, Bosch can make the most of a wealth of engineering experience and innovative materials for all of its commercial-vehicle ribbed V-belts. They achieve an outstanding wear be-

havior even under harsh operating conditions by use of ultra-modern rubbers. A tension member equipped with high-tech cords ensures their high impact resistance and resilience. Bosch ribbed V-belts are highly reliable – even if used for particularly straining powertrains with pulsating operation. Thanks to their low overall height, they offer flexible bending behavior and



Commercial-vehicle V-belts have to withstand particularly high strains without failure.

particularly good thermal properties – even with the small diameters of serpentine drives. Their single-belt characteristics ensure low vibrations.

BOSCH TECHNOLOGY FOR EFFICIENT POWER TRANSMISSION

Replacing drive components on time has by now become a standard task for workshops. The result: efficient power transmission. Compliance with the service intervals specified by the manufacturers prevents damages. For quick and safe belt replacement, Bosch provides a broad range for commercial vehicles comprising approximately 100 different types of V-belts – the majority of them being ribbed V-belts.

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