In the comfort zone!

The new Bosch TA AGM battery reliably supplies modern CVs that have high energy requirements – even in stationary operation.
All-round supplier

High-performance CV battery TA AGM

Professional truckers need to keep moving – usually for extended periods. Their commercial vehicles become like a second home over days, weeks, or even months. Equipment based on power-hungry electrical technology turns modern commercial vehicles into a mobile rest area for long-haul drivers. The numerous hotel and comfort functions, such as auxiliary air conditioning and heating, a refrigerator, microwave, or television improve working conditions for truckers, yet they place a heavy burden on the batteries – even in stationary operation. Numerous breakdown statistics – in which depleted and aged batteries top the list of causes – prove that such increased requirements can only be satisfied with a high-performance battery.

NEW TA AGM SUPPLIES COMFORT AND HOTEL FUNCTIONS

Bosch has now added an extremely capable battery for commercial vehicles to its range in the shape of the new 12-volt TA AGM starter battery. Bosch’s high-performance, vibration-resistant, and maintenance-free commercial-vehicle batteries are specifically designed for supplying a multitude of consumers – and for reliable starts. The Bosch TA AGM supplies consumers in commercial vehicles reliably over long periods – even in stationary operation. In doing so, the risk of failures and unnecessary downtimes is reduced.

LEAK-PROOF AND MAINTENANCE-FREE

The new TA AGM truck battery with AGM (absorbent glass mat) technology was developed entirely for the specific demands of long-haul...
Bosch TA battery (12V, 210Ah, 1,200A) with AGM technology for commercial vehicles

operations. With this battery type, the electrolyte is held entirely within a fiberglass mat. This makes it absolutely leak-proof and maintenance-free.

**EXCEPTIONAL CYCLE RESISTANCE**

The TA AGM also demonstrates its superiority in terms of cycle resistance, which is up to six times higher than that of conventional lead-acid batteries at a discharge depth of up to 80 percent. The risk of potential failures caused by cyclical loads is reduced; the constant output in slow-moving traffic and stationary operation is assured, as are reliable starts.

**HIGH VIBRATION RESISTANCE**

Over time, the space allocated to components in the engine compartments of modern commercial vehicles has changed. AdBlue technology and SCR catalysts need space close to the engine. For this reason, it is ever more common for the battery to be installed near the rear axle, where intense vibration prevails. Like the TE EFB battery, the TA AGM is ideal for this application thanks to its high vibration resistance as per DIN EN 50342-1. Among other things, this standard defines the highest vibration resistance tested during stress and vibration tests in laboratories – on a horizontal, vertical, and diagonal level.

**STRONG IN COLD STARTS AND START/STOP SYSTEMS**

The TA AGM boasts high cold-starting performance. With a rating of 1,200 A (CCA) and a capacity of 210 Ah, it is a reliable energy supplier for assured cold starts, in addition to all comfort and hotel functions. Due to the microcycle resistance associated with the AGM technology, it is also suitable for functions like start/stop systems and sailing/coasting without assistance from the engine.

As the most high-performance battery, the TA AGM complements the existing Bosch range of EFB batteries and conventional lead–acid batteries for commercial vehicles by adding a new, reliable premium product in OEM quality.
Workshop specialists are in high demand. Alltrucks has more than 700 partners. In order to help them reach out to qualified employees, Alltrucks has expanded its online presence to include a recruitment market for all kinds of commercial-vehicle specialists. Alltrucks Jobmarket – as the pan-

European platform is called – shows an up-to-the-minute overview of all vacant jobs within the network.

QUICK AND EASY – PARTNERS REACT POSITIVELY

The feedback from Alltrucks' network has been positive: The e-recruitment market is quick and easy to use. More than 130 Alltrucks partners have registered a company profile since its launch. Today, applicants can choose from over 100 advertised vacancies to find the right role in their preferred region. They can communicate easily and directly in their own language and also access information about the workshop placing the advertisement. Alltrucks partners can get in contact via the website.

ONLINE RECRUITMENT PORTALS AND EXTERNAL ADVERTISING

However, the Alltrucks Jobmarket is going one step further. Since September 2019, Alltrucks partners have been able to use the Alltrucks Jobmarket to post their own job adverts on established regional and national recruitment portals (StepStone, Monster, etc.) at discounted rates. Alltrucks also supervises and consults with partners to boost their professional image. In addition, centralized print, online, and social-media advertising campaigns are conducted to appeal to applicants directly.

www.alltrucks-jobmarket.com

QUALITÄT IST MEHRWERT

Qualität ist Mehrwert (“quality is added value”) – an initiative started by Germany’s leading parts manufacturers – surveyed 306 employees of commercial-vehicle workshops on the sector’s current challenges between July and August 2019.

62% named a shortage of specialist staff as one of the major challenges of the next five years.

Almost 80% of outlets attempt to attract specialists by guaranteeing greater individual freedom and flexibility.

The most frequently implemented means (62%) of addressing this shortage within the company is providing employees with further training.

58% opt for traditional job advertisements.

Nonetheless, around 14% are more proactive still when hunting for qualified staff and are already looking to other European countries.

qualitaet-ist-mehrwert.de

USING THE JOBMARKET IN FIVE SIMPLE STEPS

1. Create a company profile
2. Enter a point of contact
3. Configure job advertisements
4. Manage applications
5. Sound out the recruitment market
Bosch Denoxtronic filters: clean AdBlue for optimum dosing

The Bosch Denoxtronic system is an important element of exhaust-gas treatment systems in commercial and off-highway vehicles. With assistance from the pump and dosing module, it controls the injection of AdBlue into the flow of exhaust gas. The appropriate quantity of AdBlue is injected based on the engine’s operating state and exhaust values. A chemical reaction in the SCR (selective catalytic reduction) catalyst reduces pollutant emissions in the exhaust gas. In the course of this reaction, nitrogen oxides and ammonia are converted into water and nitrogen. AdBlue is a solution comprising 32.5% urea and 67.5% demineralized water. Bosch Denoxtronic filters reliably cleanse the AdBlue of dirt particles, assist with optimum dosing, and protect the Denoxtronic system at the same time. The Denoxtronic filter must be changed at regular intervals as per the manufacturer’s specifications. There is now a video tutorial that describes how to change the filter. www.youtube.com/watch?v=w-BNdcBn178

The function and benefits of the components are described.

**Denoxtronic service kits for CVs**

<table>
<thead>
<tr>
<th>Model/kit</th>
<th>SNR</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denoxtronic 1 service kit</td>
<td>1 457 436 042</td>
<td>DAF, MAN, IVECO, Scania, Volvo</td>
</tr>
<tr>
<td>Denoxtronic 1 repair kit</td>
<td>F00B H40 025</td>
<td>DAF, MAN, IVECO, Scania, Volvo</td>
</tr>
<tr>
<td>Denoxtronic 2.1 service kit</td>
<td>1 457 436 006</td>
<td>Case, IVECO, KHD, Renault, Volvo</td>
</tr>
<tr>
<td>Denoxtronic 2.1 repair kit</td>
<td>1 457 030 020</td>
<td>Case, IVECO, KHD, Renault, Volvo</td>
</tr>
<tr>
<td>Denoxtronic 2.2 service kit</td>
<td>1 457 436 088</td>
<td>Cummins, IVECO, Mack, Nissan, Renault, Volvo</td>
</tr>
<tr>
<td>Denoxtronic 6.5 service kit</td>
<td>1 457 436 039</td>
<td>Perkins, IVECO, CNH, JCB, Daimler India, CAMC (China)</td>
</tr>
<tr>
<td>Denoxtronic 6HD service kit</td>
<td>1 457 436 057</td>
<td>MAN, John Deere, IVECO, CNH</td>
</tr>
</tbody>
</table>

**Video: a fly-through of the exhaust-gas treatment system, Denoxtronic generations, and filter replacement**

![Denoxtronic 2.2](image)

**Overview of the Denoxtronic 2.2 system in the vehicle:** When the engine is running, the flow of exhaust gas and AdBlue becomes visible, and the system’s components are highlighted and labeled.

![Denoxtronic filters from Bosch](image)

**Cut-away view of the filter in the Denoxtronic 2.2 with compensating element:** The function and benefits of the components are described.
Commercial vehicles used in off-highway (OHW) applications – whether agricultural/construction vehicles, forklift trucks, municipal and forestry vehicles, or vehicles/units driven by industrial engines – are becoming ever more complex. For workshops dealing with commercial vehicles, new technologies represent both a challenge and an opportunity. Only with the requisite specialist knowledge can diagnostics, maintenance, and repairs on current vehicle models be conducted effectively and economically. Trained employees are obviously a clear advantage for workshops.

This is why Bosch has developed a series of special training courses for them.

**USING KTS TRUCK AND TRUCK ESI[TRONIC] 2.0 EFFICIENTLY**

This course focuses on efficient use of KTS Truck and Truck ESI[tronic] 2.0 (information types OHW1/OHW2). To this end, the installation and commissioning of software and hardware are practiced, while the application options and structure of Truck ESI[tronic] 2.0 are explained. In the practical section, component inspections are conducted using wiring diagrams and maintenance schedules, and vehicle connection variants are explained. Participants also familiarize themselves with the possibilities of control-unit diagnostics and extended tester functions (e.g., injector replacement).

**DIESEL INJECTION TECHNOLOGY**

This course concerns the safe handling of electronic diesel systems (e.g., common rail, UI, UP). The function and structure of high-pressure pumps, injectors, sensors, and actuators are explained in this context. Using Truck ESI[tronic] 2.0 and KTS Truck, participants conduct tests on the low- and high-pressure sides of the fuel system.

**EXHAUST-GAS TREATMENT**

Knowledge of the assemblies, structure, and the function of components underly the safe handling of modern exhaust-gas treatment systems. This course explains the interplay between the particle filter and exhaust-gas recirculation and the EDC, and also outlines the structure and function of SCR systems. SCR systems are tested using Truck ESI[tronic] 2.0, KTS Truck, and hydraulic measurement equipment.

**OFF-HIGHWAY SYSTEMS SPECIALIST COURSE (MOBILE HYDRAULICS)**

Service technicians and operators of electronically actuated hydraulic equipment need to understand the fundamentals of mobile hydraulics and mobile electronics. Participants in the course run by Bosch Rexroth in Elchingen learn how to assess the condition of an electronically actuated hydraulic system using mobile work machinery. The course includes practical work on the wheel loader in addition to troubleshooting on current mobile-hydraulic systems and use of KTS Truck for diagnostics on vehicle components.

**BOSCH SERVICE TRAINING COURSES**

Technicians can register easily through the Bosch Automotive Campus. The maximum number of participants is limited to twelve to ensure better learning outcomes. Two agricultural vehicles and two construction vehicles with current injection-technology systems (common rail) and exhaust-gas technology (SCR and AdBlue) will be available. Participants will work on each vehicle in teams. The course has equal proportions of theory and practice. Further information and registration

[www.automotive-campus.com](http://www.automotive-campus.com)
An expanded range of parts for rear-axle steering systems

Rear-axle steering systems are subjected to extremely high levels of stress. This is especially true in the case of special vehicles with multiple axles and heavy bodies or vehicles with very heavy loads, such as oil tankers, dump trucks, or garbage trucks. Due to the elevated risk of damage, their components must be regularly inspected in commercial-vehicle workshops and replaced if necessary. Bosch has now added 144 new part numbers to its range of spare parts for rear-axle steering systems and add-on parts for commercial vehicles. The expanded portfolio includes working cylinders, ball joints, fluid reservoirs, hydraulic accumulators, flow-limiting valves, pitman arms, valves, and flow indicators. Spare parts can be supplied quickly thanks to “make-to-stock” production and availability in over 80 countries. Combined with the quick, easy replacement, this helps to minimize the very costly downtimes that special vehicles spend in the workshop.

CAUSES OF STEERING IMPAIRMENT
▶ External mechanical damage
▶ Leaking hydraulic fluid and water ingress due to damaged bellows on the working cylinders or on the sealing rings
▶ Leakage due to contamination in the system
▶ Use of fluid with incorrect specifications
▶ Thermal overload

HIGH QUALITY STANDARDS FOR REAR-AXLE STEERING SYSTEMS

In hydraulic rear-axle steering (RAS) systems, the steering movements of the front axle are hydrostatically transmitted to the rear axle. This movement is transmitted by a master cylinder on the front axle via hydraulic hoses to the centering cylinder mounted on the rear axle. In the case of electronically controlled rear-axle steering systems (RAS-EC), a hydraulic control valve controlled by the electronic control unit governs the rear axle’s motion by means of a centering cylinder.

Rear-axle steering systems improve driving dynamics, minimize the turning circle, and reduce tire wear. As safety-critical vehicle components, steering systems are subject to stringent quality requirements. That is why Bosch also manufactures spare parts and add-on parts for workshops’ requirements to the same quality standards as original equipment.

INCLUDED IN THE RANGE OF SPARE PARTS
▶ Fluid reservoir
▶ Pressure-limiting valves
▶ Flow indicators
▶ Flow-limiting valves
▶ Hydraulic accumulators
▶ Ball joints
▶ Working cylinders
▶ Pitman arms
Let the desert shake: 2020 Dakar Rally in Saudi Arabia

Twelve days of competition, five thousand timed kilometers, and more than fifty hours’ full throttle for the racing trucks. This is how the 2020 Dakar Rally in Saudi Arabia shaped up over two weeks for the PETRONAS De Rooy IVECO team.

After more than 7,800 kilometers, all four IVECO trucks crossed the finish line, with an overall sixth-place ranking for Janus van Kasteren. The race was fiercely contested, with the trucks and equipment alike subjected to extreme loads. Team Leader Gerard de Rooy, who was not fielded as an active driver this year due to a back injury, was clearly satisfied with the performances. The two-time winner of the Dakar Rally highlighted the outstanding result by his fellow Dutchman, Janus van Kasteren, whose sixth-place finish was the best ranking of anyone in the team. Albert Llovera (15th place) and Michiel Becx (16th place) were new to the team. Attention will now turn to the 2021 race, which will once again take place in the Middle East. After in-depth analysis and evaluation of this year’s performances, the PETRONAS De Rooy IVECO team will start preparing for the races in the year to come.

www.iveco.de