Driven by
HIGH PERFORMANCE

Battery service equipment from Bosch
The Professionals for testing and charging
The battery: centre for voltage supply in innovative vehicle components

The battery service presents demanding challenges for the testers used today. No voltage spikes, that can result in sensor malfunctions, may occur during charging. Bosch battery chargers allow starter batteries to be charged carefully even while installed. High power reserves translate into successful starting assistance under all temperature conditions.

When testing the state of the battery, flexibility is decisive: Bosch battery testers allow both 12-V starter batteries and alternators with a rated output of 12 V to be tested quickly and easily.

Modern test equipment strengthens the workshop’s expertise

The extent of complex electrical and electronic systems increases with every new vehicle generation. Such systems are increasingly replacing mechanical and hydraulic components. The additional driving comfort and product quality enjoyed by customers presents totally new demands on the capabilities of the automobile workshop.

Your advantages: reliability, speed and fairness

- First class quality and high reliability for charging, testing and starting batteries
- Extensive systems expertise and wide range of products
- Technology adapted to current market requirements
Did you know?

Since 2009, the Euro 5 Standard has required that vehicle manufacturers provide technical repair information via their online portals for all independent workshops. Original manufacturer data for diagnosis, service, repair and maintenance has been available to independent workshops since then. With the Bosch PassThru software and the software from the respective vehicle manufacturer, it is possible to use the original information from the manufacturer for diagnosis in independent workshops.

A few steps must be considered for reprogramming. It is important to ensure that the vehicle has sufficient battery voltage. Reprogramming requires up to 90 ampere during continuous operation. An interruption of the connection during the Bosch Euro 5 installation or reprogramming can damage the control unit!
Universal battery charger
Fully automated charging, back-up and buffer mode

The new battery chargers BAT 645 and BAT 690 are two universal devices with a continuous output current of 45 and 90 ampere that are available as of now. Both chargers can be used for both 12 V passenger car and 24 V commercial vehicle electrical systems. Back-up and buffer operation is available. The USB port for software updates allows the installation of characteristics for new battery types and guarantees that the devices are always state-of-the-art.

**Technical data**

<table>
<thead>
<tr>
<th>BAT 645</th>
<th>BAT 690</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. charge current intensity</td>
<td>12 V 45 A 22.5 A</td>
</tr>
<tr>
<td></td>
<td>24 V 45 A</td>
</tr>
<tr>
<td>Charging characteristic</td>
<td>I1U12al3a13...</td>
</tr>
<tr>
<td>Backup mode</td>
<td>12 V / 24 V max. 20 A</td>
</tr>
<tr>
<td>Buffer mode</td>
<td>13 V / 26 V max. 45 A / 22.5 A</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-5 °C – +45 °C</td>
</tr>
<tr>
<td>Voltage</td>
<td>230 V, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Max. 800 W</td>
</tr>
<tr>
<td>Protection type (DIN 40050)</td>
<td>IP 20 D</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>220 x 115.5 x 296 mm</td>
</tr>
<tr>
<td>Weight (without charging and power cable)</td>
<td>3.7 kg</td>
</tr>
</tbody>
</table>

**Product characteristics**

- 45 A or 90 A – for all lead acid battery types (standard, maintenance-free, gel, fleece, AGM, EFB) and new Li-Ion – Lithium Iron Phosphate (LFP)
- Fully automatic charging characteristics – universal for all battery types (UNI) and specific characteristics for WET, AGM, GEL, EFB and LFP and soft charging phase for deeply discharged batteries (automatic)
- Backup mode – maintains voltage supply to buffer data (e.g. car stereos, supply and control units, etc.) during battery replacement
- Buffer mode – keeps SOC of the battery and stabilises vehicle electrical systems (engine is off)
- HMI with a dot matrix display – 18 languages
- Electronic protection management system
- USB port for SW updates
- Exchangeable charging and power cord cables
- Charger holder for wall mounting

**Charging cables:**

- Detachable, 45 A, length 3 m – 6 mm², optional 5 m – 6 mm²
- Detachable, 90 A, length 3 m – 16 mm², optional 5 m – 16 mm²
Battery tester
The best to test

BAT 131
(with integrated printer)

Perfectly suitable for testing 6 V and 12 V starter batteries (lead-acid, gel and fleece batteries / AGM). The stress-free test process leads to quick, precise and reliable measurement results.

- Optimised test algorithm to test new, unused and in-stock batteries
- Extended test of the start/charge system for 12 V and 24 V batteries.
- Saves up to 100 test results; USB port to download test results and future software updates
- Replaceable 3 m cable that allows flexible working

Amps clamp (optional)

<table>
<thead>
<tr>
<th>Technical data</th>
<th>BAT 131</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery nominal voltage</td>
<td>6 V/12 V</td>
</tr>
<tr>
<td>Application</td>
<td>Passenger car, commercial vehicle, ship</td>
</tr>
<tr>
<td>Test standards</td>
<td>JIS, EN, DIN, SAE, IEC, EN2</td>
</tr>
<tr>
<td>Battery size (acc. to CCA)</td>
<td>100 – 2,000 A</td>
</tr>
<tr>
<td>Start / charge system test</td>
<td>12 V/24 V</td>
</tr>
<tr>
<td>Printer</td>
<td>Integrated thermal printer</td>
</tr>
<tr>
<td>Menu languages</td>
<td>21</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>approx. 270 x 113 x 50 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 700 g</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0 °C – 40 °C</td>
</tr>
<tr>
<td>Adjustable cold test current</td>
<td>–</td>
</tr>
</tbody>
</table>
Accessories

Battery service

Trolley

1 687 012 102

Fig. top left: with three trays, easy-running wheels, locking brake.

Battery pliers

red handle 8 787 955 003
blue handle 8 787 955 004

No fig.: load current up to 1,000 A. Connection to charge line up to 50 mm² via thread socket. Especially strong red brass pliers, fully insulated. Copper band for better conductivity.

Battery pliers

red handle 8 784 490 027
black handle 8 784 490 026

Fig. top centre: load current up to 20 A. Connection to charging line up to 4 mm² soldered. Surface nickel-plated.

Battery pliers

red handle 8 787 955 013
blue handle 8 787 955 014

Fig. top right: load current up to 600 A. Connection to charge line up to 25 mm² via cable shoes A 6. Steel plate pliers, reinforced shoes, surface leaded, full insulated. Copper band for better conductivity.

Perfect energy source for all passenger car batteries by Bosch:
Modern vehicles are using more and more components that require electrical power. The power supply requires high performance and safety. Bosch batteries ensure this and supply the right energy for every task.

High market coverage
The market coverage for Bosch batteries is at almost 96 %.

Program flexibility
State-of-the-art technologies, optimal voltage supply, manifold applications and custom-tailored battery program. New battery types can be quickly integrated.

Reliable power, maximum safety
Bosch batteries are tested in line with strict safety and stress criteria and regularly monitored when being used on the market.
What drives you, drives us

Bosch technologies are used worldwide in almost all vehicles. People, and assuring their mobility, is what we are focused on.

Therefore, we have dedicated the last 125 years of pioneering spirit and expertise into research and manufacturing to achieving this.

We continue to work on our unique combination of solutions for spare parts, diagnostic devices, workshop equipment and services:

- Solutions for efficient vehicle repairs
- Innovative workshop equipment and software
- The world’s most comprehensive range of new and replacement parts
- Large network of wholesale customers, for quick and reliable parts supply
- Competent hotline support
- Comprehensive educational and training offers
- Targeted sales and marketing support

Find out more at:
bosch-automotive-aftermarket.com

Your local retailer:

Robert Bosch Limited
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Subject to technical and program changes