



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 sufficient battery voltage on the vehicle. Reprogramming requires up to 90 ampere during continuous operation. An interruption of the connection during the Bosch Euro 5 installation or the reprogramming can damage the control unit!

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 in 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

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BOSCH
Invented for life

Driven by HIGH PERFORMANCE

Battery service equipment from Bosch
The professionals for testing, charging and starting

Battery service equipment from Bosch

The battery: center 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

Universal battery charger

Fully automated charging, back-up and buffer mode



BAT 645 0 687 000 164

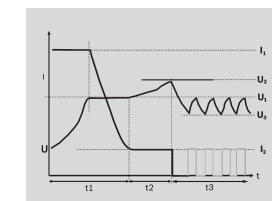
The new battery chargers BAT 645 and BAT 690 are two universal devices with a continuous output current of 45 and 90 amperes that are available as of now. Both chargers can be used for both 12 V passenger car and 24 V commercial vehicle electrical systems. Back-up and buffer operation is available. The 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.



BAT 690 0 687 000 169

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 stabilizes 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, 45A, length 3 m – 6 mm², optional 5 m – 6 mm²
- ▶ Detachable, 90A, length 3 m – 16 mm², optional 5 m – 16 mm²

Technical data	BAT 645	BAT 690	
Max. charge current intensity	12 V 24 V	45 A 22.5 A	90 A 45 A
Charging characteristic	I1U112aI3aI3...	I1U112aI3aI3...	
Backup mode	12 V / 24 V max. 20 A	12 V / 24 V max. 30 A	
Buffer mode	13 V / 26 V max. 45 A / 22.5 A	13 V / 26 V max. 90 A / 45 A	
Operating temperature range	-5 °C – +45 °C	-5 °C – +45 °C	
Voltage	230 V, 50/60 Hz	230 V, 50/60 Hz	
Power consumption	Max. 800 W	Max. 1,600 W	
Protection type (DIN 40050)	IP 20 D	IP 20 D	
Dimensions (W x H x D)	220 x 115.5 x 296 mm	220 x 115.5 x 473 mm	
Weight (without charging and power cable)	3.7 kg	6.6 kg	

Network-independent starting assistance

BAT 250 and BAT 251



BAT 250 0 687 000 020

Network-independent starting assistance with intelligent electronics protection for 12 V vehicle electrical systems to start passenger vehicle engines.

Product characteristics

- ▶ Starting assistance is free off interferences and voltage peaks
- ▶ Protection against reverse polarity
- ▶ Network-independent starting assistance
- ▶ Backup mode up to 50 A
- ▶ Start also possible with deinstalled or defect battery
- ▶ Protection against overcharge / deep discharge
- ▶ Loading the BAT 250 possible via 12 V car power socket



BAT 251 0 687 000 021

Network-independent starting assistance with intelligent electronics protection for 12 V vehicle electrical systems to start large Diesel motors, even in extreme minus temperatures.

Product characteristics

- ▶ Starting assistance is free off interferences and voltage peaks
- ▶ Protection against reverse polarity
- ▶ Network-independent starting assistance
- ▶ Backup mode up to 50 A
- ▶ Start also possible with deinstalled or defect battery
- ▶ Protection against overcharge / deep discharge

Chassis with solid rubber tires suitable for BAT 250 and BAT 251 1 688 003 196

Technical data	BAT 250	BAT 251
Rated voltage	12 V	12 V
Starting assistance power	700 A	1,400 A
Cross-section of starting assistance cable	25 mm ²	35 mm ²
Length of starting assistance cable	2 m	2 m
Weight	approx. 15.0 kg	approx. 26.0 kg

Battery tester

The best to test



BAT 110 0 986 A70 550

Clear statement, small price: the BAT 110 is the quick, reliable allrounder for the stress-free testing of 12 V lead acid batteries (standard, maintenance-free, gel and fleece batteries / AGM). There are many test possibilities: battery SOC, battery diagnostics, voltmeter, ignition system test or charger system test. The cold test current can be set in line with the IEC, DIN, SAE, CCA and EN standards, a conversion table to JIS standards can be found on the back of the device. The allrounder is supplied via the battery to be tested. The test results are communicated via the 4-digit numerical display and LED displays. The BAT 110 is characterized by simple and intuitive handling and a robust and solid housing.



BAT 131 (with integrated printer) 0 684 400 731

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.

- ▶ Optimized 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) 1 681 354 034

Technical data	BAT 110	BAT 131
Battery nominal voltage	12 V	6 V / 12 V
Application	Passenger car, commercial vehicle	Passenger car, commercial vehicle, ship
Test standards	JIS, EN, DIN, SAE, IEC	JIS, EN, DIN, SAE, IEC, EN2
Battery size (acc. to CCA)	100 – 2,000 A	100 – 2,000 A
Start / charge system test	12 V / 24 V	12 V / 24 V
Printer	–	Integrated thermal printer
Menu languages	–	21
Dimensions (W x H x D)	197 x 98 x 40 mm	approx. 270 x 113 x 50 mm
Weight	approx. 295 g	approx. 700 g
Operating temperature	0 °C – 40 °C	0 °C – 40 °C
Adjustable cold test current	200 A to 900 A acc. to SAE/EN cold test current 120 A to 550 A acc. to DIN/IEC 200 A to 850 A acc. to CCA JIS conversion table on the back of the device	–

Accessories

Battery service



Trolley 1 687 012 102

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

Battery pliers red handle blue handle 8 787 955 003 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 black handle 8 784 490 027 8 784 490 026

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

Battery pliers red handle blue handle 8 787 955 013 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.