

# VOLKSWAGEN

AKTIENGESELLSCHAFT

## VAS 5903 workshop battery charger

100% safety during diagnostics and flash memory updates



## VAS 5903 battery charger for power supply during diagnostics and flash memory updating. With current input testing according to VW test instructions for starter batteries

The electrical energy demand on the vehicle power supply during diagnostics and repair work is becoming more and more significant in the workshop.

During software updates to control units (flash memory updates), the power requirement is especially high and constant system voltage is very important.

This is also very important when updating flash memory in engine management systems because this process simulates engine emergency operation conditions which cause many electrical loads to run at full capacity during the update. Therefore, 70 ampere can flow for more than 90 minutes for large engines and

smaller engines may normally see 45 ampere over 30 minutes. If the vehicle voltage falls below 12.0 Volts during this time, the flash memory update process is cancelled by the system and must be re-started.

Unfortunately, the control unit is often irreparably destroyed in the process. A replacement part can cost in the neighborhood of EUR 500 to 2000 not to mention the additional labor involved.

And, unfortunately, these costs are eaten by the workshop when an incorrect battery charger or no battery charger is used for the power supply during diagnostics and software updates.



#### APPLICATIONS

- Power supply during diagnostics and upgrading the flash memory of control units
- Presentation vehicles with high power requirements during the presentation
- New vehicle transfers to the customer
- Current input testing according to VW test instructions for starter batteries



The fact is that today vehicle diagnostics and control unit flash memory updates are no longer possible without a battery charger supporting vehicle voltage. Unfortunately, battery chargers with outdated technology or with insufficient power are too often used for this purpose.

#### **Do away with program crashes**

The VAS 5903 battery charger guarantees a safe and powerful power supply for flash memory upgrades and diagnostics.

With 70 ampere, you will have enough power during the flash memory upgrade process so that you can also charge the vehicle battery at the same time.

The integrated microprocessor compensates for voltage fluctuations within split seconds during the diagnostics or flash memory upgrade process.

Thus program crashes due to an overloaded power supply are a thing of the past. This saves you both time and money - no more repair costs.

#### **Significant reduction in consequential damages**

Increasingly, upscale vehicles are coming loaded with all kinds of entertainment systems which have such a high energy requirement that this can no longer be compensated for during permanent shortrun operation via the vehicle's generator. These kinds of vehicles require powerful recharging each time diagnostics is done in the workshop, which requires the highest amount of energy within the limited diagnostics time.

This significantly reduces consequential damages for sulphated batteries as well as starting problems for these vehicles. Using the VAS 5903, even large vehicle batteries can be re-charged with more than one third of their nominal capacity within 30 minutes.

#### **Corrupt input testing**

With its integrated automatic current input testing mode, which corresponds to VW's test instructions for starter batteries, quality assurance specifications for warranty claims can be handled quickly and easily.

Test results are shown on the display and can be added to the log.



## Product information

- Battery charger with the option to preselect capacity for all types of starter batteries
- For (re)charging or charge conservation of conventional lead acid-, lead calcium/silver batteries, sealant type (AGM/MF) batteries, and maintenance-free lead gel batteries, without disconnecting from the vehicle power supply
- Can be updated via the integrated USB interface
- All functions (battery capacity, nominal voltage, service function, FSV/buffering function) can be clearly viewed and set on the display
- The latest charging data (charging current, charging voltage, Ah charged so far) are shown on the display
- Current input testing according to VW test instructions for starter batteries

## Applications

**Diagnostics and charging mode.** Supplies parallel loads during diagnosis. Particularly suitable as vehicle voltage supply when overwriting the control unit's flash memory. The charger offers maximum safety during this process with a current of 70 ampere.

**Rapid charging** thanks to Active-Invertertechnology.

**External power supply** without battery, e.g. during battery change, in showrooms or at trade fairs.

**Refresh mode.** Low-power batteries can be recharged in this mode (desulphating). This process takes place via a microprocessor-controlled IUloU characteristic.

**Current input testing.** Automatic testing according to VW test specifications for starter batteries within the scope of warranty claim handling.

## Protective functions

- Electronic reverse polarity protection
- Thermal overload protection
- Safety cut-out
- Power surge protection, no voltage peaks
- „Soft start“

## Included items & technical specifications

- 12 volt, 70 ampere battery charger in unbreakable steel/plastic housing with soft rubber edge guard
- 5.0 m charging cable with fully insulated charging terminals
- 5.0 m mains cable with grounding-pin plug
- Mains connection: 230 V AC 50 Hz, optional 110 V AC 60 Hz
- Nominal output: 1080 W
- CCA tested
- UL approved
- Protection: IP 21
- Dimensions: 315 x 115 x 200 mm (W x D x H)
- Weight: 6.0 kg

## Guarantee

24 months

## Manufacturer

akkuteam Energietechnik GmbH

## Order number

ASE 447 033 00 000

© Volkswagen Aktiengesellschaft  
K-VO-W Konzern-Vertrieb  
Genuine Parts and Service  
Workshopequipment  
Brieffach 011/4915  
38436 Wolfsburg/Germany

Internet  
[www.erwin.volkswagen.de/](http://www.erwin.volkswagen.de/)  
Workshop Equipment & VAS Software/  
Workshop Equipment and  
special tools catalogue

For internal use only.  
Technical amendments possible.  
Status 02/2012