

## Error Messages and Corresponding Operation

CHECK CLAMPS

is displayed if the connection is poor between the battery clips and the posts of the battery. Ensure that the battery posts are free of dirt and grease before remaking the connection. *It is important to note that each battery clip has a separate isolated plate on the inside of its jaw. Both the isolated plate and the other side of the jaw need to be in good contact with the battery post to ensure a reliable test result.*

9V INTERNAL BATTERY IS LOW

is displayed if the internal 9V battery is low or the connection between instrument and internal battery terminals is poor.

Exception: If the internal battery is very low, and the voltage of the battery under test is less than 8V, no message will be displayed. Replace the internal battery before proceeding.

LOAD ERROR

is displayed if the clamps are not connected properly. Please fully charge the battery and retest after checking clamps. If reading is the same, the battery tester needs to be fixed.

## Warranty

TecMate (International) S.A./N.V., Ambachtenlaan 6, B-3300 Tienen, Belgium, offers this limited warranty covering defective parts or manufacture, for a period of 2 years from the documented date of sale to the user. Wear and tear, damaged or deteriorated leads or battery clips, damage ensuing from exposure to liquids, acidic or corrosive vapours, oxidation or other contamination, physical damage of any nature and/or any other defect or damage resulting from user malfeasance are excluded from warranty cover. In case a 9V dry cell battery is supplied with the tester, this as well as any damage caused by the discharge of any 9V battery in the tester, is specifically excluded from this warranty. This limited warranty specifically excludes any and all consequential damages that may arise. Your statutory rights are not affected. To claim on warranty you must return the tester together with the original dated proof of purchase document direct to the authorized distributor who will repair or replace the tester at his discretion.

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**TestMATE™**  
**SPORT**



## Digital battery tester for 12V motorcycle/ATV/PWC batteries

### Instructions for use

The TestMate Sport is an easy-to-use portable battery tester specifically developed for 12V motorcycle and similar batteries of from 2 to 35Ah (SAE) rated capacity, including sealed MF motor-cycle batteries. Batteries of various different types of construction can be accurately tested for servicereadiness and the amount or percentage of SAE- or DIN-rated CCA remaining, by way of 3 selectable programs:

- (1) **STD** for batteries with filler caps.
- (2) **SEALED / AGM / GEL** for MF ("Maintenance-Free") motorcycle batteries of the type with Absorbent Glass Mat separators, whether dry-charged or "wet" factory-filled and -activated, of Yuasa and GS Battery (YT, YTR, YTX), East Penn Manufacturing (ETX), and their after-market equivalents, and starter batteries with gel-electrolyte construction, (Exide-BMW).
- (3) **HIGH POWER AGM / GEL** for Yuasa (and equivalent) YTZ and YTX "High Performance" MF, and Odyssey®. (Displayed as "HI PWR AGM/GEL").



**SAFETY PRECAUTIONS: IMPORTANT:** read these safety and operating instructions each time before using the tester.

**WARNING! Batteries emit EXPLOSIVE GASES - prevent flame or sparks near batteries. Do not smoke.**

Ensure adequate ventilation when working near batteries. Battery acid is highly corrosive. Wear protective clothing, goggles and gloves, and avoid contact with battery acid. In case of accidental contact wash immediately with soap and water. Check the battery for a damaged casing or seal and do not test such batteries. Check that the battery posts are not loose; if so, have the battery professionally assessed. If the battery posts are corroded, clean with a copper wire brush; if greasy or dirty, clean with a rag damped in detergent and dry. Before testing batteries provided with filler caps check that the electrolyte level is correct, and top up with distilled water if necessary. Do not use the tester unless the leads and battery clips are in good, undamaged condition.

**Protect the whole of the tester from contamination by acids and fluids, from exposure to damp and humidity, and from physical and accidental damage. Any damage to the unit, its leads or accessory parts resulting from contamination, exposure or damage whether during use or in storage is NOT covered by warranty.**



**tecMATE™**



## Operation

- 1) It is recommended to disconnect and remove the battery from the vehicle and place on a hard flat surface. If the battery is to be tested on the vehicle, first disconnect ALL accessories and loads to avoid a wrong result.
- 2) Check that the battery posts are clean (see above) and correct the electrolyte level of batteries with filler caps.
- 3) If not delivered with its battery already fitted, insert a standard 9 Volt dry cell battery into the TestMate Sport, ensuring good connections. This battery is normally supplied with the tester but may not be in certain countries. NOTE: To avoid risk of damage to the tester do not leave a discharged battery in it for any length of time. 9V **INTERNAL BATTERY IS LOW** is displayed to warn of a discharged battery. Replace the battery before using the tester again.
- 4) Connect the black (negative) battery clip to the negative (or black) battery post, and the red battery clip to the positive (or red) battery post.  
**IMPORTANT NOTE: Each battery clip has a separate isolated plate on the inside of its jaw. Both the isolated plate and the other side of the jaw must be in good contact with the battery terminal to ensure a reliable test result.**



- 5) Once the connection to the battery is made, the display will show BATTERY TESTER, then the BATTERY VOLTS.



```
BATTERY VOLTS
xx,xx V
```

**LANGUAGE CHANGE:** the default language is English. If you wish to select another language (6 available), just press one of the selection keys  . Confirm your choice by pressing the "ENTER" key. The selected language becomes the new default language but can be changed again afterwards.



```
LANGUAGE: ENGLISH
SELECT  
```



**NOTE:** The battery voltage display is intended to indicate if the battery has sufficient charge prior to the test. During the test the battery voltage must remain above 12,4V for a standard (STD) filler cap battery and 12,65V for an AGM /GEL MF battery at a 20°C/68°F ambient to give a GOOD > READY result. Press "ENTER" key to continue.

- 6) The display now asks you to select the battery type, STD / FILLER CAP, or SEALED / AGM / GEL, or HI PWR AGM / GEL. Press the   keys until the correct battery type is displayed, e.g. "SEALED / AGM / GEL", then press ENTER.

```
BATTERY TYPE  
SEALED/AGM/GEL
```

- 7) The display will now ask you to "SELECT THE PARAMETER" between:  
DIN CCA (Cold Cranking Amps according to DIN,

```
SELECT THE  
PARAMETER AH
```

see note below),  
SAE CCA (Cold Cranking Amps according to SAE, see note below), and  
AH (Storage Capacity in Ampère-hours).  
Press the   keys to select the preferred parameter. Confirm your choice by pressing the "ENTER" key.



**NOTE:** There are 2 main classification systems for the rated Cold Cranking Amps (CCA) of starter batteries, DIN (Deutsche Industrie-Norm) and SAE (Society of Automotive Engineers). The SAE standard is mostly used in North America and Asia. Japanese battery manufacturers such as GS-Yuasa usually provide SAE CCA values. The DIN standard is mainly used in Europe and by European battery manufacturers.

**Confirm according to which CCA standard the CCA of the battery under test is stated! It should be stated on the label on the battery, if not check the manufacturer's documentation.**

- 8) The display will now ask you to "SET THE VALUE" of the rated CCA or Ah, depending on your selection of parameter in the previous step.  
*If you selected Ah as the parameter, it is important to enter the correct Amp-hour value between 2 and 35 Ah as this determines the resistive load value and CCA parameters that will be used during the test. Refer to the battery listings on the chart in the base of the protective holder to obtain the rated CCA or Ah for the most popular battery models.*

```
SET THE VALUE  
                xx AH
```

The display reverts to 2Ah if a capacity > 35Ah is entered. The test will start as soon as you press ENTER to confirm the CCA or Ah value you have set.

- 9) TESTING is now displayed for a few seconds followed by both a text summary of the result, the actual CCA, and % CHARGE. The possible result texts that can be displayed are shown below. Once the test has been completed, the   keys can be used to select % Cranking Amps (displayed as %CA) as an alternative to % Cold Cranking Amps (%CCA) which is the default selection.

```
GOOD > READY
xxxCCA  xxx% CHARGE
```



The battery capacity is sufficient to adequately crank the engine.

```
GOOD > RECHARGE
xxxCCA  xxx% CHARGE
```

No fault was detected, but the voltage dropped below the minimum levels during the test. (Minimum charge levels: STD = 12,4V and SEALED / GEL / AGM = 12,65V). Recharge and then retest the battery.

GOOD > READY / GOOD > RECHARGE: additional information:  
A fully charged battery displaying 80 to 99% CHARGE is serviceable, but is showing signs of wear. The TestMate may continue to indicate GOOD > RECHARGE for a worn but still serviceable battery, even after recharging.

```
IS BATTERY  
CHARGED ? YES
```

The voltage is below the minimum required charge level prior to the test. Press the   keys to select YES or NO as appropriate, then press enter to confirm, whereupon the test result will be displayed.

```
RECHARGE > RETEST
xx,xx V  xx,x %
```

This message is displayed if NO was toggled and confirmed after the message "IS BATTERY CHARGED?" Recharge and retest the battery.

```
BAD > REPLACE
xx,xx V  xx,x %
```

The internal resistance is lower than normal and the voltage is below the minimum charge level, indicating a shorted cell or internal damage. Replace the battery.

```
BATTERY FLAT
RECHARGE > RETEST
```

The battery voltage was below 4V prior to the test, indicating a deep discharged and/or sulfated condition. Recharge with a BatteryMate or OptiMate PRO charger before retesting the battery.

- 10) Disconnect the tester's red battery clip, then the black clip from the battery posts. The tester will switch off automatically after a few seconds.