

LASER®

Part No. 9471

Test & Charge 12V Smart Battery Tester Instructions



www.lasertools.co.uk

Introduction

An all-in-one battery tool, this genuine 'service hybrid' device not only diagnoses but also maintains and recovers batteries. With an impressive range of 40 to 2200 CCA, the Laser 9471 covers everything from small powersports and motorcycle batteries to heavy-duty commercial truck batteries. Three-in-one functionality: test, charge and repair.

- Applications include: Battery testing (AGM, EFB, GEL, Lead Acid, VRLA, 12V Lithium-ion batteries, including LiFePO4 (Lithium Iron Phosphate)).
- Functions include: Comprehensive health test includes CCA and internal resistance analysis. Charge: Intelligent multi-stage charging. Repair: Advanced pulse tech to break down sulphation in older lead acid batteries.
- Precision charging: Adjustable current settings to match battery size.
- Charger dimensions: 182 x 93 x 60mm, portable enough for a glovebox or toolkit.

Laser Tools 9471: 7A multifunctional Battery Tester and Charger with 2.8inch TFT LCD colour display.

Input Voltage	AC 100~240V 50/60Hz
Max Charging Voltage	Normal Mode=max. DC14.8~15.8V LiFePO4 Mode=max. DC14.4V
Charging Current	1A/3A/5A/7A (Lead-acid); 5A (LifePo4)
Working Temperature	-20~40°C, Humidity 90%

Functions

Battery charging

Battery test

Cranking test

Charging test

Battery repair

Plug type: UK

CCA range: 40-2200 CCA

Battery types: AGM/EFB/WET/MF/LiFePO4

2.8inch TFT LCD colour display

Memory function: review up to 20 stored data readings

Applicable for all 12V car and motorcycle batteries

Safety Protection

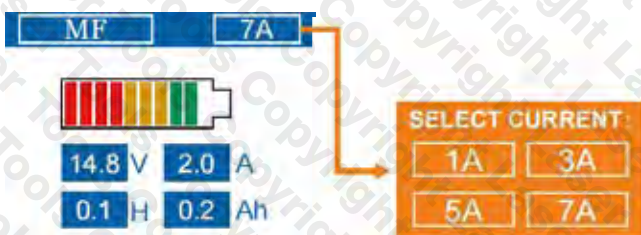
- 1) Protected against polarity reversal (the device will not work with incorrect connection).
- 2) Temperature protection (built-in temperature fuse, the device will power off automatically once the temperature is too high).
- 3) Leakage Protection (power-off automatically when the test clip is removed).
- 4) ABS flame-resistant material
- 5) Non waterproof: Do not use this product in damp or wet conditions.

Instructions

1. Battery Charging



- Connect the red clamp to battery positive pole and black clamp to negative pole. Connect the charger power lead to mains A/C supply. Input Power: AC 100~240V 50/60HZ.
- Select the battery charge option from the main menu. Select the appropriate current: 1A 3A 5A 7A (Charging current: 1A/3A/5A/7A (Lead-acid); 5A (LiFePo4).



Choose 1A/3A/5A/7A according to the appropriate current.

2. Battery Test (Disconnect charger from mains supply)

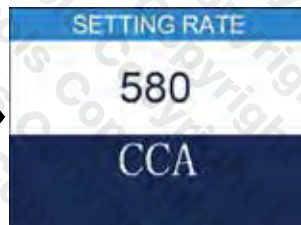


- Enter battery test function
- Select battery type

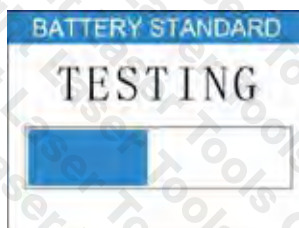
Instructions

SELECT STANDARD	
CCA	EN
SAE	IEC
JIS	Ah
DIN	MCA
BCI	CA

c) Select test standard



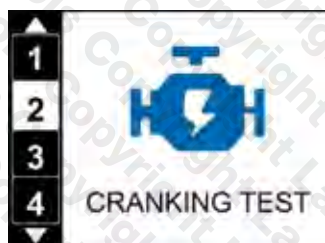
d) Input rated value (using UP button).



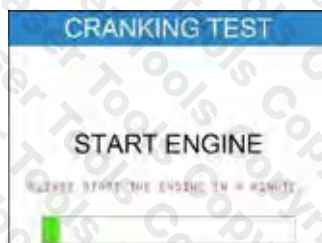
e) Press "Enter" to start testing and get test results

BATTERY TEST		
GOOD BATTERY		
SOH	100%	530A
CHARGE	100%	12.63V
INTERNAL	R	5.66mΩ
RATED		580A CCA

3. Crank Test



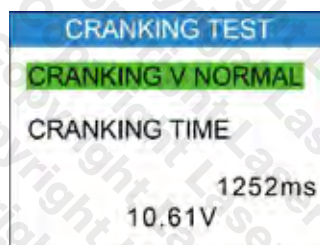
a) Enter crank test



b) Start engine



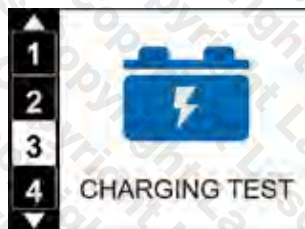
c) Start engine in a minute



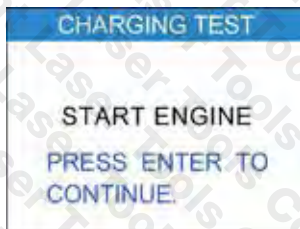
d) Crank time results

Instructions

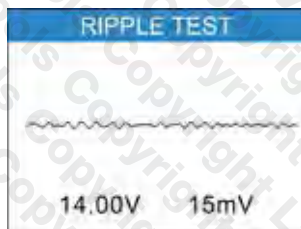
4. Charging Test



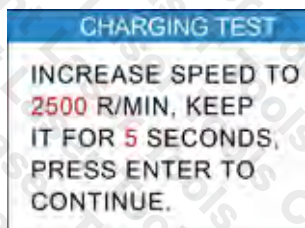
a) Enter charging test



b) Start engine



c) Ripple test



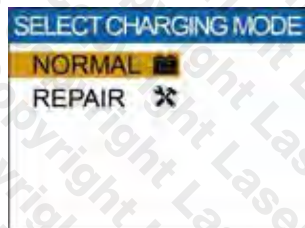
d) Increase speed to 2500R/Min

CHARGING TEST	
CHARGING V NORMAL	
LOADED V	13.89 V
UNLOADED V	13.93 V
RIPPLE V	15 mV
RIPPLE V	NORMAL

e) Charging test result

5. Battery Repair

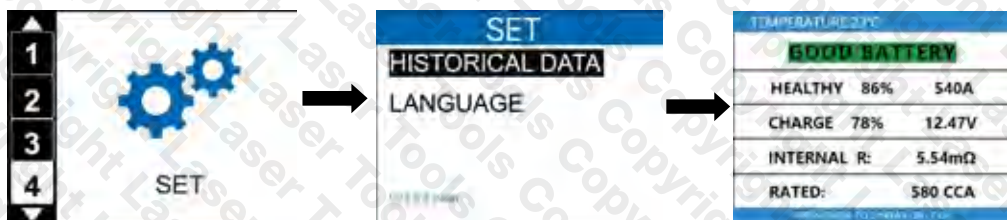
One-click repair your battery using pulse voltage and current, increasing the performance and SOH (state of health).



Instructions

6. Review Data

Choose HISTORICAL DATA and press “ENTER”, you can see the latest 20 groups of record data.



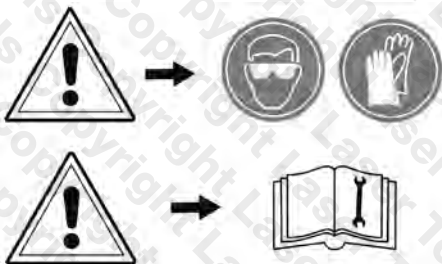
7. Set Languages

Enter the language setting interface, then you can switch languages according to requirements:

ENGLISH, SPANISH, FRENCH, DUTCH, KOREAN, RUSSIAN, PORTUGUESE, SIMPLIFIED CHINESE, NETHERLANDS, ITALIAN.



Safety Warnings - please read



- Always take extreme care when connecting the charger to the vehicle battery. Always connect red cable clamp to the positive terminal of the battery first. When disconnecting, always remove the black cable clamp from the negative battery terminal of the battery first.
- Danger of sparking: (explosion risk) if vehicle battery has recently been charged, ensure area is well ventilated and **ensure eye protection is worn** before connecting the charger.
- Danger of sparking: do not connect charger if there are any fuel leaks or fuel vapour present.
- Do not use the charger if the clamps or clamp cables are damaged.
- Do NOT touch the positive red cable clamp and the negative black cable clamp together.
- The 9471 charger is only suitable for 12 Volt vehicles.
- Do not let the jump starter get wet or use in damp or wet conditions.
- Keep the jump starter clean and store in a dry and secure area.
- At product end of life, dispose of the charger according to local authority guidelines.
- No liability is accepted for incorrect use of this product — do not use the product for tasks it is not designed for. Use the product correctly and with care. Failure to do so may cause damage and/or personal injury and will invalidate the warranty.

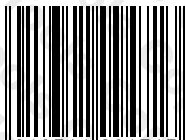


Safety First. Be Protected.

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



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this bottle please recycle it

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Guarantee



Distributed by The Tool Connection Ltd

Kington Road, Southam, Warwickshire CV47 0DR
T +44 (0) 1926 815000 F +44 (0) 1926 815888
info@toolconnection.co.uk www.toolconnection.co.uk

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