LITHIUM MOTORCYCLE **BATTERY GUIDE**

How to handle lithium batteries?



FEATURES

- Ready to use & Maintenance free
- Ultra lightweight compare to lead acid battery
- √ Very high cold cranking performance
- ♣ Ultra safe thanks to the BMS integrated
- √ Very fast recharge
- → Multi-positional fitment
- ⋄ Integrated LCD battery tester
- √ Very low self-discharge
- √ Compliant with 2021 European (EU) 2019/1148 regulation for the sale of acid for batteries







INSTALLATION

Check the battery condition (battery voltage and state of charge) before installation, pressing the tester button. LCD screen will automatically set off after 10 seconds.



Voltage	13.2	13.0	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.2
SOC	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	Ο%

- Mhen the battery voltage is lower than 12.8V (80% of SOC), a charge is recommended. When the battery voltage is lower than 12V (40% of SOC), the battery must be charged.
- 4. Have a professional the electrical system of your motorcycle tested to ensure it functions properly before installation (to avoid any overcharging)





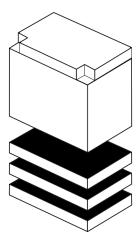


LITHIUM MOTORCYCLE BATTERY GUIDE

How to handle lithium batteries?



- The vehicles electrical system needs to be limited in voltage between **14-15V** when charging:
 - The battery can't be full charged if the charging voltage is less than 14V.
 - The battery will be powered off by the BMS if the charging voltage exceeds 15V. Once the voltage drops below 15V, the battery will automatically wake up.
- Only use Lithium batteries on new bikes: for vehicles built before the mid-1990's with generators and /or with external voltage regulators, you must change the voltage regulator to a new modern electronic type as overcharge will damage the battery.
- A Compare the new battery with the old one, and use the plastic spacers to adjust the dimensions if necessary. By using the plastic spacers, the battery can be installed firmly, and meanwhile it has better vibration resistance and better heat dissipation.
- Depending of the Lithium battery model, 1 to 3 spacers could be necessary to fit perfectly the motorcycle battery box.



USE

- ◆ During starting procedure, each starting attempt should not exceed 5 seconds, an interval of 5 seconds. minimum between 2 starting attempts should be respected. The battery should rest at least 3 minutes after 5 starting attempts.
- √ Lithium batteries have a reduced starting capacity during cold weather (below <0°C).
 </p> If this results in the incapability to start the engine there are a few ways to deal with this:
 - 1. Connect a Lithium compatible charger for 30 seconds.
 - 2. Turn on the lights for 1-2 minutes before starting (to warm up the battery).

LITHIUM MOTORCYCLE **BATTERY GUIDE**

How to handle lithium batteries?



CHARGING

- Mever charge a lithium battery with a Lead Acid charger with desulfation program. Irreversible damage to the battery will occur.
- Never maintain the battery during a long period. Lithium batteries don't support a trickle-charge in the way a lead-acid battery does. We recommend to make periodically a 30 minutes charge (every 2 months).
- Never charge the battery with a higher current than 1C (corresponds to 1x the battery capacity). This is the MAX charging current accepted.
- 🕠 To maximize the battery lifespan, ensure that the charging time does not exceed 30 minutes while charging at the maximum current even if the battery is completely discharged.

STORAGE

- The battery should be stored with 70% state of charge max (approx.).
- During storage, the battery should be charged once every 6 months.
- Check during storage regularly the voltage and in case it would drop below 12.4V, recharge as described on the charging instructions.







