



Battery Storage

Battery Storage - Handling and Storage Requirements

- Keep away from heat sources; store in cool, ventilated, and dry environments.
 - Stacking should not exceed 5 layers; pallets should not be stacked.
 - Ensure that the positive and negative terminals of the batteries do not short-circuit.
 - Do not tilt batteries more than 45 degrees during transportation and storage.
 - Handle with care.
 - Implement a first-in, first-out principle.
 - Properly label batteries upon storage; use a first-in, first-out method to avoid performance degradation due to prolonged storage.



Battery Storage - Voltage Monitoring

- Check the open-circuit voltage every three months.
 - Voltage $\geq 12.45\text{V}$ meets basic usage requirements.
 - Batteries with a voltage $< 12.45\text{V}$ should be charged and maintained immediately.
 - Batteries stored for six months should undergo maintenance charging regardless of voltage.



Battery Storage - Charging Maintenance

- Introduction and selection of non-automatic charging equipment:
 - Use constant voltage, current-limiting charging:
 - Multi-battery charger (for stock batteries - series charging)
 - Set total voltage to $12V (16V) \times \text{number of batteries}$.
 - Set current to $1/10$ of the capacity value.
 - Single battery charger (for returned or deeply discharged batteries - individual charging)
 - Set voltage to $16.0V$.
 - Use a small current, such as $1/20$ of the capacity value.
 - Full charge is determined when the current drops to $1-2A$ and remains unchanged for 2 hours.
 - Single automatic charger
 - Multiple battery chargers



Battery Storage - Maintenance Charging Precautions

- Do not mix batteries from different manufacturers, models, or batches for charging.
 - The environment should be cool, ventilated, dry, and clean.
 - Keep away from sparks; no smoking or open flames; avoid direct sunlight.
 - Ensure terminal cleanliness, correct polarity connections, and reliable contact.
 - Stop charging if there is acid spray, overheating, or liquid shortage, and identify the cause.
 - After charging is complete, turn off the charger switch first before disconnecting the battery's charging cables.
 - Test the battery voltage 24 hours after charging to avoid false voltage readings.

Powering today, into tomorrow.

Thank You



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