

Lithium Ion Cell Handling Information

Thunderstruck Motors

Safety and Care

- Short circuits or mishandling can damage cells internally and be dangerous to personnel.
- Tools should be insulated and never placed on the pack.
- All terminals are high current sources and should be kept insulated during assembly.
- Lift assembled packs with non-conductive straps to avoid short circuits.

Pack Construction and Operation

- Test cells for voltage balance before assembly and charge individually if necessary.
- Verify connections with a voltmeter before attaching interconnects or cables.
- Torque cell terminal hardware to values recommended by the cell manufacturer.
- Modules must be held under compression using rigid end plates and through bolts or metal straps. Tighten bolts or straps until cells are held together firmly but not compressed beyond edge to edge contact.
- Cover cell terminals with a non-conductive surface to prevent shorts during operation.
- BMS installation is required for long life and safety during charging and operation. The BMS will keep cells in balance and will alert power systems if any cell exceeds high or low voltage design limits.