



Retailer Battery Handling Recommended Practices

Lithium-ion e-bike battery packs store a large amount of energy, and like any fuel source they need to be handled properly. Specialized Turbo battery packs are designed with a state-of-the-art battery management system to keep them safe, but returned batteries could be damaged or compromised and present a risk of fire. Follow these guidelines for safe handling of returned Turbo packs in your store.

IMPORTANT: ALWAYS STORE SUSPECTED FAULTY BATTERY PACKS OUTDOORS AND NEVER SHIP THEM BY AIR.

1 When a rider needs service for a suspected battery fault:

- Ask riders to bring in their bike with the battery pack at around 50% charge level. A discharged pack stores less energy and has much less fire risk.
- Inspect any pack you are servicing for signs of risk or damage. Refer to section 4.
- Diagnose all battery packs using the Specialized diagnostic firmware together with USB tool.
- Check bike event logs in Turbo Studio. A full bike service review is recommended.
- Update firmware wherever possible. Bugs/issues can often be rectified through an update.
- Don't temporarily hold suspected faulty battery packs inside your store. If a fault is suspected, move the battery to your fire-planned safe location area immediately. See section 3 for storage guidelines.

2. When a fault cannot be resolved in store and the battery pack needs to be replaced:

- Take pictures of the battery pack, clearly capturing the serial number label, warranty label and overall condition of the battery pack (including any reported damage/fault) along with the diagnostic log-files.
- Make a warranty claim or assisted replacement order once the pack is safely stored.

3. Facilities and Protection:

- Store suspected faulty battery packs in a designated fire-planned safe location. Choose a space outside the immediate building that is access-controlled and away from the retail store and combustible materials. This location should be protected from direct sunlight, moisture (rain, snow, flooding). Ideally 5°C - 20°C (41°F - 68°F) but no higher than 38°C/100°F.
- Use a container provided by an approved battery recycler or alternatively a metal container (e.g., a 55-gallon steel drum). Store no more than 12 suspected faulty packs at any time. Fill containers with sand or vermiculite to cover the battery, adding more as each battery pack is added to the container.
- Plan regular shipment/pickup of suspected faulty packs per section 5. Do not store for extended periods. Storage containers/barrels should be clearly labelled as containing lithium-ion batteries.
- Keep a CO2 (Class BC) or dry chemical (Class ABC) fire extinguisher in your service area along with suitable PPE. Check with your local authority, but typically fires involving lithium-ion batteries are considered Class B fires.

4. Signs and handling guidance for at-risk battery packs:

- **Signs:** While rare, battery packs that develop heat or smoke, emit an unusual smell or sound, distort or change shape, show signs of impact or tampering, or behave abnormally (e.g. won't turn off) should be considered 'at-risk' and need additional care in handling.
- **Handling:**
 - Never attempt to charge or repair an at-risk battery pack
 - Move any battery pack considered at-risk to your fire-planned safe location immediately using appropriate PPE. Exercise caution as gases may be flammable/toxic - failure can be sudden and hazardous.
 - In the event of fire/smoke - or if you are at all concerned - contact your local fire service.
 - Once safely stored - take notes and pictures along with bike serial number and call Specialized Rider Care to make a safety report.

5. Recycling vs. returning faulty batteries:

- Never ship suspected faulty battery packs by air.
- In most cases Specialized will not need the battery pack returned. Specialized Rider Care will specify packs that need to be returned.
- To recycle faulty battery packs once claimed, use an authorized battery recycler for pick up and recycling.
- In the event a battery pack needs to be returned, Specialized will arrange shipping for you. Lithium-ion batteries are classified as dangerous goods and cannot be shipped by ordinary courier.

