

# BluePeak Mobility

Technical Product Guide ASCII Safe

# GlideX Scooter 2

## Description:

48V electric scooter for urban commute.

## Serial Numbers:

- BP-GX2-13716
- BP-GX2-75162
- BP-GX2-32633

## Specifications:

- Battery 48V 12.5Ah 13s3p
- Motor 600W hub
- Range up to 45 km
- Dual disc e-ABS
- Controller sine wave
- Load up to 120 kg

## Diagnostics:

- Controller CAN error scan
- Brake sensor continuity
- Battery cell balance and IR

## Troubleshooting Steps:

Reset the controller and inspect the main harness for pin push-back, then perform a stationary throttle test on a stand. If the wheel jitters or cuts out, check the phase wires and hall connectors for oxidation and reseal.

Charge the pack to full and leave it at rest for 2 hours, then read cell voltages. If delta exceeds 100 mV, run a balance cycle and recheck; if the delta returns immediately after a short ride, flag the pack for service.

## Decision Tree:

No power -> wake BMS -> pack < 40V -> charge -> cell delta > 100 mV after balance. If delta remains above threshold after two balance attempts, classify as battery pack fault and RMA; if delta normalizes, proceed with capacity test.

No drive -> CAN error persists after firmware reflash. If the same error code returns with a known-good throttle and harness, classify as controller fault and RMA; if cleared, return to service and document firmware version.

## Expanded RMA Conditions:

- Controller persistent CAN error after reflash
- Cell delta > 100 mV or IR up > 30 percent

- Frame crack or weld failure

# TrailRide E-Bike Pro

## Description:

Mid-drive e-bike tuned for hills with torque sensing.

## Serial Numbers:

- BP-TRPRO-35064
- BP-TRPRO-76494
- BP-TRPRO-60928

## Specifications:

- Battery 36V 15Ah
- Motor 350W mid drive
- 9 speed Shimano
- Torque and cadence sensors
- Hydraulic disc brakes
- 42V 3A charger

## Diagnostics:

- Torque sensor zero and gain
- Battery capacity and IR
- Motor temp and hall sensor

## Troubleshooting Steps:

Run torque sensor zero and gain procedures with the crank unloaded, then verify outputs while applying steady pedal force. If the zero drifts during a 5 minute idle test, reseal the sensor connector and repeat calibration.

Inspect chainline, magnet spacing, and wheel speed pickup, then perform a hill climb at moderate assist. If the controller cuts out under normal load, check motor temperature logs and verify that the heat sink is free of debris.

## Decision Tree:

No assist -> zero drift > 3 percent after calibration. If drift persists on a second attempt and wiring is intact, classify as torque sensor failure and RMA; if drift stabilizes, road test and release.

Cut outs on load -> controller temp > 100 C in logs. If shutdown repeats under normal use with proper airflow, classify as controller fault and RMA; if only at abusive load, educate on assist levels and gearing.

## Expanded RMA Conditions:

- Torque sensor failure zero drift > 3 percent
- Controller thermal shutdown under normal load

- Battery capacity < 70 percent within 200 cycles