🧰 IdleLogic™ Diagnostic Checklist

Required for Warranty Claim Review Field Diagnostics

📒 CLAIM INFORMATION

Field	Detail
Dealer Name	_____
Technician Name	_____
Customer / Fleet Name	_____
Date of Installation	_____
Claim Submission Date	_____
BPU Serial Number	_____
Truck Year	_____
Make	_____
Model	_____
Last 8 of VIN	_____
FleetSavvy™ Status	☐ Active ☐ Inactive ☐ Faults DTCs

🔌 STEP 1: VISUAL & PHYSICAL INSPECTION

Inspection Item	Pass	Fail	N/A	Notes
BPU housing intact and securely mounted	☐	☐	☐	_____
All wiring secured, clean, and free of corrosion or burns	☐	☐	☐	_____
Main fuse and DC breaker in place and intact	☐	☐	☐	_____
Terminals tight, clean, insulated	☐	☐	☐	_____
DC-DC charger wiring verified and secure	☐	☐	☐	_____
No signs of tampering or unauthorized modification	☐	☐	☐	_____

🔋 STEP 2: VOLTAGE, CCA & LOAD TESTING

🚚 Truck Batteries – Individual CCA Load Test (Engine OFF)

Battery	Voltage	Rated CCA	Tested CCA	% of Rated	Pass/Fail	Notes
Battery 1	_____ V	_____	_____	_____ %	☐ / ☐	_____
Battery 2	_____ V	_____	_____	_____ %	☐ / ☐	_____
Battery 3	_____ V	_____	_____	_____ %	☐ / ☐	_____
Battery 4	_____ V	_____	_____	_____ %	☐ / ☐	_____

Batteries under 70% of rated CCA should be considered failing, even if voltage is above 12.5V.

⚙️ Alternator & Voltage Drop Test (Engine ON)

Test	Measured Voltage	Pass/Fail	Notes
Alternator output at alternator terminal	_____ V	☐ / ☐	_____
Voltage at truck batteries harness terminal	_____ V	☐ / ☐	_____
Voltage at BPU charge input (DC-DC charger)	_____ V	☐ / ☐	_____
Voltage drop from alternator to BPU input	_____ V	☐ / ☐	Should be < 0.5V

🔋 IdleLogic BPU – LiFePO₄ Battery Voltage Test

Test Point	Voltage	Pass/Fail	Notes
BPU resting voltage (total system)	_____ V	☐ / ☐	Expect 26.4V–27.2V
BPU voltage under load (HVAC or inverter active)	_____ V	☐ / ☐	Should remain > 25.0V
Charge input (engine running)	_____ V	☐ / ☐	Expect 27.0V–29.2V
BPU Battery A (12.8V nominal LiFePO₄)	_____ V	☐ / ☐	~13.2V
BPU Battery B (12.8V nominal LiFePO₄)	_____ V	☐ / ☐	~13.2V

🌡️ STEP 3: THERMAL & ENVIRONMENTAL CHECK

Item	Pass	Fail	N/A	Notes
No swelling, overheating, or heat discoloration	☐	☐	☐	_____
BPU cool to touch after startup cycle	☐	☐	☐	_____
No liquid, venting, or odor present	☐	☐	☐	_____
BPU location properly ventilated	☐	☐	☐	_____
System mounted within acceptable cabin temp zone	☐	☐	☐	0–50°C range

🧩 STEP 4: TELEMATICS & FIRMWARE CHECK

Item	Pass	Fail	N/A	Notes
FleetSavvy™ portal is accessible and reporting	☐	☐	☐	_____
Last 7 days of data shows normal or relevant fault logs	☐	☐	☐	_____
Firmware version is current (auto-checked via portal)	☐	☐	☐	_____
OTA update history (if applicable) reviewed	☐	☐	☐	_____

✅ STEP 5: FUNCTIONAL TEST

Function	Pass	Fail	N/A	Notes
System powers up and initializes	☐	☐	☐	_____
IdleLogic BPU supplies power to inverter/loads	☐	☐	☐	_____
DC-DC charger activates with engine on	☐	☐	☐	_____
Breaker not tripped / internal fuse intact	☐	☐	☐	_____
No shutdowns or restarts under load	☐	☐	☐	_____
All system LEDs or indicators functioning	☐	☐	☐	_____

📎 REQUIRED ATTACHMENTS

- ☐ Photos of installation: wiring, mount location, battery access
- ☐ Screenshot or PDF of FleetSavvy™ logs (last 7 days)
- ☐ Proof of install date (invoice or dealer work order)
- ☐ Screenshot of firmware version (if applicable)

🧾 TECHNICIAN SIGN-OFF

I certify that I have completed all required tests and inspections listed above, and that the information provided is accurate and complete.

Technician Name: _____

Signature: _____

Date: _____