

EV Service Center and Workshop Safety Checklist

Electric Vehicle & Charging Station Industry

COMPLIANCE – HAZARDOUS WASTE HANDLING

Hazardous materials (batteries, coolant, solvents) disposed via authorized channels.

☐ Yes☐ No☐ NA

MSDS for all workshop chemicals available and staff trained on hazards.

☐ Yes☐ No☐ NA

CRITICAL – DIAGNOSTICS & SOFTWARE SAFETY

Vehicle diagnostic sessions are performed by authorized personnel and logged.

☐ Yes☐ No☐ NA

Firmware and software updates applied during service use validated builds only.

☐ Yes☐ No☐ NA

Data backup of vehicle logs is taken prior to reprogramming.

☐ Yes☐ No☐ NA

CRITICAL – LOCKOUT/TAGOUT (LOTO)

LOTO procedures are implemented for all electrical and mechanical isolations.

☐ Yes☐ No☐ NA

LOTO keys/locks are properly managed and stored to avoid unauthorized removal.

Yes

No

NA

CRITICAL – PERSONAL PROTECTIVE EQUIPMENT (PPE)

Technicians wear appropriate HV PPE (insulated gloves, face shield, arc-rated clothing).

Yes

No

NA

Insulating gloves and sleeves are dielectric-tested and tagged with test date.

Yes

No

NA

No metal jewelry, watches, or conductive items allowed in the service bay.

Yes

No

NA

DOCUMENTATION – SERVICE RECORDS & WARRANTY

Complete service report with HV tests, software versions, and technician sign-off is stored per vehicle.

Yes

No

NA

ELECTRICAL SAFETY – GROUNDING & BONDING

Temporary grounding/earthing straps are used during HV disassembly and tested.

Yes

No

NA

EMERGENCY RESPONSE & COMMUNICATION

Emergency contact list, procedures, and assembly point are displayed and known to staff.

Yes

No

NA

MAINTENANCE – TOOLS & CALIBRATION

All torque tools, insulation testers, and meters are calibrated and tagged.

☐ Yes☐ No☐ NA

Tool control system is used to account for all tools before and after service.

☐ Yes☐ No☐ NA

MAINTENANCE – WORKSHOP EQUIPMENT

Lifts and hoists are inspected and load-tested periodically.

☐ Yes☐ No☐ NA

Compressed air systems have moisture and oil traps and are regularly drained.

☐ Yes☐ No☐ NA

Coolant handling systems for battery thermal loops are leak-free and labeled.

☐ Yes☐ No☐ NA

OPERATIONAL – CHARGING DURING SERVICE

Charging of customer EVs in workshop follows safe protocol and is monitored.

☐ Yes☐ No☐ NA

Charging connectors used for diagnostics are inspected and functional.

☐ Yes☐ No☐ NA

QUALITY – PARTS & TRACEABILITY

Replacement HV components and batteries are genuine and traceable (part number, batch).

Yes

No

NA

Used/defective parts are tagged and stored separately with job reference.

Yes

No

NA

QUALITY – POST-REPAIR INSPECTION

Post-repair functional check includes high-voltage system health and insulation test.

Yes

No

NA

All safety interlocks (door, charge port, HVAC, etc.) tested after service.

Yes

No

NA

A road/test drive is conducted by trained technician to validate repairs.

Yes

No

NA

SAFETY – CUSTOMER VEHICLE MANAGEMENT

Customer vehicles with hybrid or high-voltage systems are identified at intake.

Yes

No

NA

Vehicle keys and immobilizers are handled per security protocol during service.

Yes

No

NA

SAFETY – FIRE & SPILL CONTROL

Fire extinguishers (suitable for electrical and lithium fires) are available and serviced.

Yes

No

NA

Spill kits and neutralizing agents are available for electrolyte or coolant leaks.

Yes

No

NA

SAFETY – VENTILATION & FUME CONTROL

Workshop ventilation prevents accumulation of flammable or toxic fumes.

Yes

No

NA

SAFETY – WORKSHOP LAYOUT & HOUSEKEEPING

Work bays are clearly marked with HV hazard signage and restricted access.

Yes

No

NA

Floor is clean, dry, and free of trip hazards, oil, or stray cables.

Yes

No

NA

SUPER CRITICAL – BATTERY REMOVAL & HANDLING

Battery removal and installation follow OEM procedures and use designated lifting equipment.

Yes

No

NA

Battery packs are stored in a ventilated, fire-proof quarantine area when removed.

Yes

No

NA

State of Charge (SOC) before battery handling is within safe limits per OEM (e.g., 20–

50%).

Yes

No

NA

SUPER CRITICAL - HIGH VOLTAGE SERVICE PROCEDURES

High-voltage systems are de-energized and isolated before any service work.

Yes

No

NA

Qualified EV technicians perform high-voltage diagnostics and repairs.

Yes

No

NA

Service area has dedicated HV workbench with insulated flooring and tools.

Yes

No

NA

TRAINING & COMPETENCY

Technician competency matrix is up to date with HV and battery certifications.

Yes

No

NA

Regular refresher training for emergency battery incidents is conducted every 6 months.

Yes

No

NA