

# PPE GUIDE FOR ELECTRIC VEHICLE WORKERS

In a world where the electric vehicle (EV) revolution is charging ahead for a cleaner, greener future, they also bring with them a unique set of challenges and risks for those working in maintaining and repairing them.

This guide is intended for mechanics with an essential kit to keep themselves and other workers safe when dealing with electric and hybrid cars.

**SAFETY GOGGLES:**

This part of the equipment is extremely important when working on high voltage as it protects the eyes from any 'flash over' that can occur if an electrical spark is produced.

**FACE SHIELD:**

When combined with safety glasses or goggles, a face shield provides an important additional layer of protection not just for your eyes but also protects the rest of your face from burns, cuts, or even exposures to toxic or caustic chemicals.

**EAR PROTECTION:**

In an enclosed area where cars and heavy equipment are always running and causing loud noises, hearing loss is a real concern and a common problem for many mechanics. Even if you think your hearing is fine now, prolonged exposure can gradually damage ears without sufficient protection.

**ELECTRICAL INSULATED GLOVES:**

EV manufacturers recommend that insulated rubber gloves should be worn when working near all high-voltage components, not just the vehicle batteries. Ordinary latex gloves are not thick enough and do not provide sufficient protection from the shock hazard.

**HARD HAT:**

Hard hats protect you from high-impact debris by absorbing the shock of the impact and offer the best head protection when worn correctly. Hard hats are resistant to penetration, falling objects and extreme heat, making them an essential part of the kit.

**RESPIRATOR MASK:**

Workers who perform paint spray operations know that using good respiratory protection products is absolutely necessary. Even brief, unprotected exposures to paint mists and vapours may cause irritation or potentially lead to serious health problems.

**FLAME-RESISTANT COVERALLS:**

Flame-resistant overalls will cloak you head to toe in the ultimate protective layer, shielding you from welding spatter, flammable debris, electric arc and static.

**SAFETY FOOTWEAR:**

When you work with a live electric source, it's essential to wear boots that provide adequate protection from shock hazards. Insulated safety footwear consists of an electrically insulated sole as well as other safety features such as protective toe caps. These boots are helpful in dissipating the build-up of static electricity from the user's body.



**SIGNS AND LABELS:**

Create a safe working environment for technicians and individuals alike. Introduce cordoned-off areas and display accredited signage where necessary.



**FIRST AID KIT:**

Essential for immediate treatment of minor injuries and should be part of every mechanic's safety kit.



**84%**

of employees who sustain a head injury are not wearing head protection



**50%**

of construction workers will suffer a serious eye injury during their career



**99%**

of noise-induced hearing loss is preventable through proper protection



**25%**

of all workplace accidents involve hands and fingers



**25%**

of all reported disabling injuries involve foot injuries